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THE SILICOSIS PROBLEM*†

By BURGESS GORDON, M. D.,
Philadelphia, Pa.

The silicosis problem throughout the ages has been a challenging and stimulating subject, arousing vital discussions with reference to the health and welfare of the miner and the efficiency and prosperity of industry. Two important, inseparable considerations have been stressed increasingly as the value of the earth's stores and the dangers of mining have become more and more apparent: (1) effective production and (2) protection of the miner's health. As with the development of all scientific knowledge, the investigation of silicosis has progressed tediously and laboriously, the impressions and deductions having been colored by the judgment, enthusiasm and skepticism of the day. The implication of a certain organic dust (silica) as the causative factor and the recognition of characteristic symptoms have marked the important steps of progress. With the present view that the manifestations are not always proportional to the extent of the structural disease, as noted in the x-rays and pathologic examinations, and that symptomatic relief is possible through physiologic adjustment, there has been striking progress in understanding the nature and behavior of the fundamental processes.

Neolithic man, working with freshly-mined flint, apparently was the first sufferer of silicosis.[1] Indeed, examinations of Egyptian mummies lend credence to the view that silicosis is a prehistoric disease. The dangers of mining were recognized during the Greek and Roman ascendance; actually laborers, fearful of their health, were not attracted to the mines, necessitating the use of slaves. Justinian remarked that "mining is almost as severe as the death penalty" (proxima morti poena metalli coercitio); equally significant was the reference of Pallux to the use of bags by miners for covering their mouths. During the dark ages there was no recorded interest in silicosis, but with the 16th century enlightenment and progress appeared. Paracelsus, in 1534, and Agricola, in 1556, published important books on the subject of mining and its hazards.

Agricola, a highly educated physician in Bohemia, became a student of mining at the age of 32, acquainting himself thoroughly with the problems and the current literature.[1] Indicating his critical and searching attitude, he wrote, "I have omitted all those things which I have not myself seen, or have not read or heard from persons upon whom I can rely." Illustrating the sociologic trend, he stated that miners labored seven hours a day for five days a week, the remaining hours being designated for leaving and entering the mines. It was customary to work three 7 hour shifts in twenty-four hours. The night shift, which extended from 8:00 p. m. to 3:00 a. m., was permitted only when there was pressing need. Agricola observed also that while laborers working in certain mines were not allowed to continue on two successive shifts, in other mines they were permitted to work for longer periods, provided there were financial demands, and especially as food provisions became higher in cost. In describing the medical aspects, Agricola posed the view that suppuration of the lung tissue asso-

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ciated with emaciation, ultimate disability and a high mortality rate was caused by dust. The rapid course of the disease was illustrated in referring to the woman who married seven husbands, all of whom "this terrible consumption has carried off to a premature death." The remarkable value of respirators and efficient ventilation in mines attracted attention: ". . . on the one hand some mines are so dry they are devoid of water and this dryness causes the workmen even greater harm, for the dust which is stirred and beaten up by digging penetrates into the wind pipe and lungs and produces difficulty in breathing and the disease the Greeks call asthma – if the dust has corrosive qualities, it eats away the lungs."

Paracelsus, a contemporary of Agricola, was the son of a Swiss physician of noble birth, a great traveler, and a Sophist or reformer by nature.[1] He moved with great energy against the orthodox tenets of the day, arousing opposition and criticism, especially among his conservative-minded colleagues. With opposition, at first, and persecution later, he was forced out of Germany and wandered into the Scandinavian countries. Remaining energetic and without despair, he followed every opportunity for study and experience, his new interest becoming miners' disease. Convinced that the condition was occupational, he stated ruefully that "we must also have gold and silver, also other metals – iron, tin, copper, lead and mercury – if we wish to have these, we must risk both life and body." Paracelsus is recognized historically as the first European physician who was realistic and possessed an understanding of the relationship of respiratory disability to mining.

Observers and writers, following in the path of Agricola and Paracelsus, added materially to the knowledge of silicosis. Notable among these is Pansa who reported the deposition of mineral particles "on the walls of the lungs". Stockhausen characterized silicosis as a disease with difficult breathing, short-windedness, hoarseness, and a severe, hard cough, indicating that such manifestations often occurred as the forerunner of consumption, eventually killing the individual. Ramazzini, also living in the 17th century, and called the father of industrial hygiene, recognized the occurrence of miners' lung disease and advised the use of respirators and ventilation. Beddoes, in 1799, of the same view as Stockhausen, warned that the inhalation of dust "may lead to consumption". In the 18th century, Thackrah, an Englishman, directed attention to the high morbidity and mortality of British miners, emphasizing that work in sandstone is dangerous, as compared with the safety of mining limestone.[1] He explained that limestone is ". . . full of vertical and other fissures which allow the superincumbent beds of water to percolate through the roof of the mine; whilst the sandstone strata, which are impervious to water, preserve the mine quite dry; consequently, the minute particles of rock formed by blasting or pickaxe are kept in a dry state within the sandstone mine, forming, as it were, an atmosphere of dust which the miner is constantly inhaling." "In the limestone mine, the particles, on the contrary, are wet as they are formed by the constant oozing, dropping and splashing of the insinuating water." Although miners worked only six days a week, few survived to the age of 40 years. With these observations, Thackrah's name has become identified with the warning that the inhalation of sandstone is dangerous.

Knowledge of silicosis was rapidly increased during the 19th century.[1] Farr, in 1843-1862, established beyond doubt that a high mortality rate in South African miners was associated with the mining of hard rock, and showed that the incidence of tuberculosis complicating silicosis was high among Cornish miners after relatively short periods of work in South Africa. Greenhow's discovery, in 1864, of particles of silica in the lungs of grinders by the use of polarized light was an important step in amplifying the knowledge of silicosis.

Haldane, according to Hamman,[2] suggested a relationship to the absorption of body juices, indicating that such minerals which absorb the juices readily are transported by the phagocytes and rendered innocuous, e.g., carbon and shale. Gardner, differing with this view, observed that granite, which is absorbent, causes rapid and widespread fibrosis. Collis[2] has considered that the harmfulness of dusts varies with the dissimilarity of their composition, for example, those which are irritating cause inflammatory reactions and are easily and quickly discharged. Mavrogordato's[2] experimental studies suggested that while certain dusts are readily eliminated, others produce initial reactions in the alveoli with shedding of the epithelium. It would appear from his studies that silicosis dust causes minimal reaction and tends to accumulate in the lung, in comparison with carbon which is easily eliminated with the act of coughing and expectoration. With reference to the pathology and the x-rays of silicosis, there recently has been some question as to the significance of certain features accepted for several years in the United States. Fletcher,[3] of England, has referred to the differences between pure silicosis and coal miners' disease, indicating that the former is not characteristically present

among the coal miners of Cardiff. He emphasized that the massive conglomerate bodies as seen at autopsy and in the x-rays may not be silicosis. Gough[4] has called attention to the occurrence of focal emphysema in contradistinction to the massive emphysema observed in cases of anthracosilicosis in the United States.

A comprehensive report of silicosis in South Africa was made by Irvine, Mavrogordato and Pirow in 1930.[1] The data disclosed three periods of progress following the initial activities of gold mining in 1886-1899, when the dangers of silicosis were not appreciated: (1) the period from 1901-1910, when the tentative measures for prevention were instituted, (2) the period from 1911-1916, when more active measures for prevention were inaugurated and (3) the period beginning in 1919, when fully systematized procedures, with compensation, became effective. According to Orenstein who discussed the report at a meeting of the Royal Institution of Mining and Metallurgy in 1947, the "production rate" of silicosis in mining was 900 cases a year among approximately 10,000 miners, as compared with the present rate of about 81 per 10,000. The outstanding accomplishment in South Africa was the replacement of dry drilling with wet drilling, as far as possible, and the regulations against working on dry, broken ground and entering the face of the mine immediately after blasting. The plan of pre-employment health examinations for excluding conditions predisposing to silicosis, as evolved through the offices of the Silicosis Medical Bureau of South Africa, and the laws for timely pensioning, have reflected credit on the industry and the legislative body of the country.

Orenstein, with more than thirty-two years of experience in South Africa, has critically and carefully evaluated the available data on the prevention and fundamental aspects of silicosis.[1] The following features appear significant: Silicosis is admittedly a disease of the lungs produced by the inhalation of silicate, the term "dust" being understood as particulate matter exclusive of living organisms. Orenstein calls particular attention to the work of Gye, Purdy, Kettle and King who have proved that silica damages the lung by chemical action through gradual solution, and not mechanically, as was thought in the early investigations of silicosis.[1] According to animal experimentation, the smaller particles are the most dangerous in the production of silicosis, this being attributable, at least in part, to their high degree of solubility. Evidently, the quantity of soluble silica inhaled in the lungs is the determining factor in the development of silicosis, the high concentration of the finely divided particles being more deleterious than the prolonged inhalation of smaller quantities. Thus, while acute silicosis is related to high dosage of silica, leading to severe manifestations with early disability or death, the inhalation of silica in small quantities over a long period of time apparently favors the gradual development of silicosis in chronic form which is of an insidious, slowly progressing nature. Evidently, the quantity of silica becomes increasingly serious in direct ratio to the period of absorption.

Certain questions have been raised and emphasized by Orenstein in the consideration of individual susceptibility, the reliability of dust control with existing measures of mine ventilation, and the use of rock drilling instead of dry drilling. These subjects are viewed with the proposal that certain factors may not be clearly understood. There undoubtedly are differences of tissue reaction, or susceptibility, in individuals of different groups, e.g., the American Indian may die from a comparatively benign case of measles; a certain individual may sneeze violently on passing a small sprig of ragweed; another manifests sensitivity to a nonpungent gas, the attack being prolonged in bouts of coughing and spitting; some persons contract coryza on the slightest exposure, the unfortunate trend being an attack of acute tracheobronchitis with considerable disability, far out of proportion to the attacks of other individuals living and working in the same environment. Likewise, apart from tissue sensitivity, there may be structural or physiologic responses of minute though significant proportions, as illustrated in the disturbances of ciliary action of the mucous membrane, impairment of bronchiolar peristalsis, and faulty movements of the diaphragm, all retarding the passage of secretions and subsequently interfering with pulmonary function. The normal mechanism of cough may be hampered, adding to the problems of retained secretions and accentuated tissue sensitivity. Supporting this view of individual susceptibility and the contributing influences of chronic pulmonary diseases, is the fact that silicosis in South Africa today is less extensive than it was twenty years ago, the change being attributed to the exclusion of "sensitive persons" from mining.[1]

In referring to the value of wet drilling, the question of absolute security has been raised by Orenstein.[1] Admittedly, wet drilling is preferred to dry drilling, and yet the splashing of water over finely divided rock may serve as a carrier of fine silica, simulating an aerosol. The same question may apply to the use of sprays for controlling the dust. Illustrating the need for a critical examination of technic and various industrial measures is the fact that some miners who have used wet drilling and who have worked

in a moist atmosphere (miners' statement) for several years are contracting silicosis.

The pathology, the associated physiologic disturbances and the occurrence of signs and symptoms are reviewed as the basis for considering the aspects involved in disability and the requirements for treatment.

With the emphysematous lung of silicosis there is distention of the parenchyma, especially in the bases and sternal margins, with pallor, loss of elasticity and deposition of pigment. In certain cases, there is a fine dissemination of fibrous tissue. Feathery consistence is noted on palpating the less fibrous areas of the lungs. Blebs, bullae and spontaneous pneumothorax may be part and parcel of the emphysema. The alveoli are distended, ruptured, or fused with other air sacs. In focal emphysema, small patches of dilated alveoli are surrounded by fibrotic processes. With intercurrent infections, "patches" of pneumonic-like processes are superimposed, often creating a bizarre admixture of acute and chronic inflammation.

In tuberculosis associated with silicosis, there is the formation of granulation tissue and scarring in a remarkably chronic state. The pathology shows a variable mixture of silicosis and tuberculosis; for example, the infection may be masked by the underlying silicotic process, or the silicosis may predominate, and only on careful examination will tuberculosis be disclosed. The characteristic pathology of the cardiovascular system in silicosis is hypertrophy of the right ventricle of the heart with congestion in the bases of the lungs.

Normal breathing depends on the adequate physical as well as physiologic function of the lungs.[2] The various factors involved are recognized in the movements of the lungs during rest and exercise. The clinical features of normal breathing are expansion of the chest with lowering of the diaphragm during inspiration, followed on expiration by diaphragmatic elevation and contraction of the thorax. The excursions of the lungs are both horizontal and vertical. While inspiration occurs as an active muscular effort, expiration is essentially passive and depends on the recoil of the lungs and the elasticity of the chest wall. In strenuous exercise a modification of the respiratory movements occurs, the diaphragm rising only partially during expiration, the lungs remaining in a state of distention. In a sense, expiration occurs imperfectly, and each succeeding inspiration begins before expiration is fully accomplished. With the greater demand for air there is an increase of inspiratory effort which, however, remains uncompensated since there is no similar degree of expiratory stress. Although the expiratory muscles are brought into play, their effectiveness is transient because of fatigue and the difficulty of coordination, with the result that inspiration remains essentially compensatory. While the normal lungs resume their previous movements, positions and functions following exercise, the abnormal lungs tend to remain stretched, even after prolonged rest. Thus, the combined effects of increased inspiratory and expiratory pressure are definitely contributory in the development of emphysema.

The state of overdistention of the bronchi and alveoli is an important cause of atrophy of the alveolar walls and their permanent dilatation, as noted in certain cases of silicosis. Bronchial obstructions are important causes of the dilatations. They may be mechanical or physiological, permanent, partial or transient in type. Retention of secretions and swelling of the mucous membrane are involved in the progressive stages of obstruction. A serious mechanical disturbance following retention of secretions is the development of mucoid "pearls" which serve as ball valves, permitting air to pass in one direction but not in the other. Bronchospasm occurs as an independent mechanism, or it may be closely associated with the influences of abnormal bronchiolar secretions. The disturbance interferes, in varying degrees, with normal pulmonary aeration.[5,6,7] The precipitating causes include the direct irritative effects of abnormal secretions, allergy, sympathetic nerve influences and hard, choking cough associated especially with intercurrent, acute tracheobronchitis. Cough, a common accompaniment of bronchospasm, is both traumatizing and irritating to the chronically disturbed mucous membrane. The physiologic disturbances related to bronchospasm or obstruction (unequal aeration and perfusion) and the percentage changes in total lung volume are shown in the accompanying illustrations (figs. 1 and 2).

The symptoms of silicosis throw light on the nature of the underlying disturbances (pathologic, physiologic, or infection) and should be carefully evaluated. Cough, dyspnea and bouts of respiratory disturbances are characteristic of silicosis but do not necessarily indicate a chronic progression of the disease. With marked emphysema, puffiness and shortness of breath are noticeable on slight exertion; hurried walking, stair climbing and the episodes of acute respiratory tract infections are aggravating influences. Symptoms of associated tuberculosis or bronchiectasis are cough with expectoration of pus, bloodspitting, weakness and bouts of fever; in tuberculosis the pulmonary symptoms, weakness

and loss of weight, usually are more pronounced. In some instances the deteriorating processes of age and failures of the circulation participate and even predominate, thus accentuating the factors of the silicosis *per se*.

The physical signs depend essentially on the degree of tissue replacement with fibrosis, the extent of the emphysema, the presence of infection and the malposition of the heart and mediastinum. It has been observed that abnormal signs may closely parallel the occurrence of symptoms and in some instances disclose the etiologic factors. Unilateral lagging of the chest is a feature of localized fibrosis or obstruction of the air-way leading to the affected part. The rounded type of chest with exaggeration of the interspaces is characteristic of emphysema, abdominal type of breathing being a feature. In certain emphysematous cases there may be the long, flat type of chest which offers an important problem for diagnosis and treatment. The most striking alterations are the scattered musical rales of emphysema and the localized fine, medium-sized or coarse rales noted especially in pulmonary congestion, acute bronchitis and so-called pneumonitis. The signs are accentuated transiently during periods of faulty drainage and localized disturbances of function, and are almost always associated with cough, difficult expectoration and dyspnea. These episodes are sometimes mistaken for pneumonia or the actual progression of the disease.

Roentgenography of the lungs in silicosis reflects the degree of structural fibrosis and usually the presence of emphysema, but it is not always a reliable index of the extent of pulmonary disability. Small, more or less discretely formed silicotic nodules, varying in size from pinhead to millet seed, are noted in so-called first stage silicosis. Dissemination of the lesions with coalescense or conglomeration is noted in the moderately advanced or so-called second stage of the disease. Massive conglomeration, often associated with infection, is observed in far advanced or third stage silicosis. Emphysema is suggested by the presence of increased illumination of the lung fields, localized or generalized, with displacement of the diaphragm downward and restriction of the diaphragmatic movements during the respiratory cycle. In cases with the flat type of chest there is marked lowering of the diaphragm, lengthening of the mediastinum, and sometimes elevation of the midstructures of the lungs (hilar glands). It should be emphasized that the extent of the pulmonary alterations, as shown in the x-rays, may not be proportional to the degree of disability, e.g., extreme disability may be present in the case with minimal lesions, and *vice versa*.[5]

Modern as well as ancient literature mentions the complexities of the silicosis problem. It is not surprising, therefore, that treatment has been largely empirical and not altogether satisfactory. Previous measures to control the manifestations

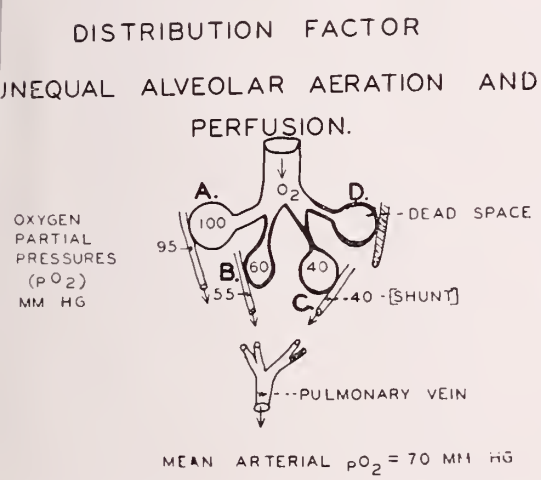

Fig. 1. Fibrosis and loss of elasticity impair alveolar aeration in varying degrees, resulting in decreased alveolar pO_2 and a corresponding decrease of arterial pO_2. Alveolar aeration may be blocked, yet perfusion maintained, or there may be aeration but no perfusion. The present figure is a schematic representation of four alveoli: (a) normally ventilated and perfused alveolus; (b) an alveolus with aeration impaired by loss of elasticity and fibrosis, having a consequent lowering of alveolar pO_2; (c) an alveolus nonaerated due to blockage of bronchiole but perfused, thus acting as a small shunt; (d) an alveolus with aeration but no perfusion, a functional dead space. With intermittent positive pressure breathing and the use of bronchodilator drugs, the function of "b" and "c" may be improved through facilitated drainage of secretions and adequate ventilation.

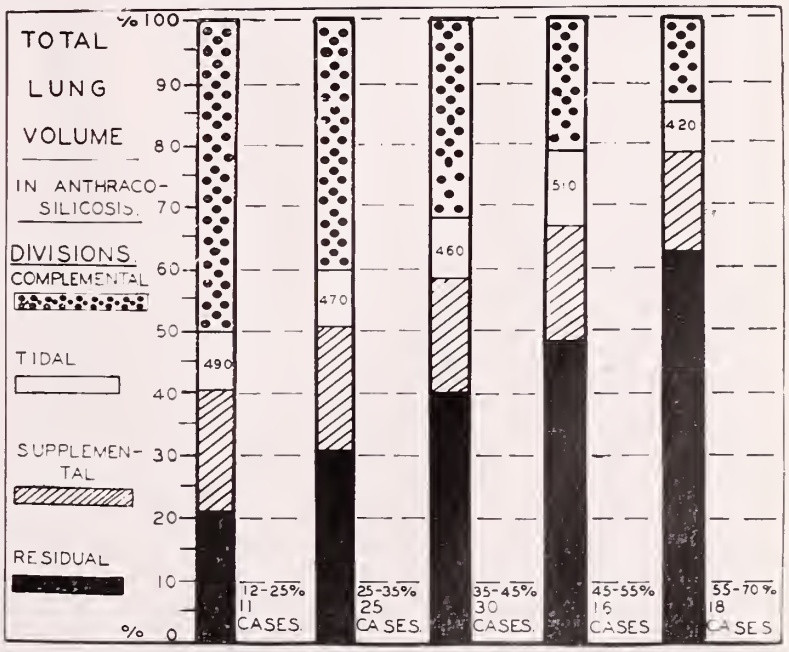

Fig. 2. Percentage changes in the various divisions of total lung volume correlated with the degree of pulmonary emphysema from measurements in 100 cases of anthracite coal miners. The number of cases in each group and the range of residual air per cent of total lung volume appear at the bottom and to the right of the column represented. Note that the increase in residual air occurs principally at the expense of complemental air.

through physical rest, the use of sedative drugs for cough, expectorants to improve bronchial drainage, epinephrine for dyspnea and aerosols administered in the customary manner have been ineffectual. It appears that the basic requirements have not been approached. Illustrating the failure is the observation that sedative drugs favor the retention of pulmonary secretions with accentuation of the dyspnea, resulting often in progression of the disease. Work stoppage and the over-indulgence in rest cause limited respiratory movements, resulting indirectly in lowered oxygen saturation with retention of pulmonary secretions and the consequent accumulation of residual air in the lungs. The expectorant drugs such as ammonium chloride and iodide are useless because their action, if any, is limited to the bronchial mucosa which is not fundamentally involved in silicosis. The possibilities of dynamic therapy have been emphasized with the observation that work is possible in the presence of extensive structural disease. It would appear as a fundamental concept, therefore, that extensive disease necessarily is not a deterrent for laborious work and, accordingly, therapy should be directed in the manner of rehabilitation of disturbed pulmonary tissue.

The treatment of silicosis should be broadly concerned with the following aspects: (1) the avoidance of further inhalation of silica, (2) symptomatic relief, (3) measures that favor elimination of existing silica and abnormal secretions in the bronchiolar passage, (4) regulation of the respiratory and general physical activities of the body and (5) in prevention, the use of substances for neutralizing the effects of silicate. Pre-employment and periodic health examinations are perhaps equally important as the current measures of dust control.

General medical care includes the correction of metabolic states and the contributing factors of infection. It is desirable to eliminate chronic infections of the teeth and respiratory passages in order to avoid gravitation of pus and abnormal secretions into the dependent parts of the lungs. Sinus disease and allergic states will accentuate, if not accelerate, the development of silicosis, and with their first appearance the laborer should be definitely advised against mining. Heart disease, hypertension and obesity are predisposing to pulmonary disability, and the affected miner should not be permitted to work until the conditions are effectively controlled.

Therapeutic rest in bed definitely is not indicated in uncomplicated, moderately advanced silicosis. Actually, the control of respiratory movements through rest favors disuse of the lungs, resulting in impaired physiologic function. Retarded movement of air in and out of the lungs and the lessened discharge of bronchial secretions are the penalties. In terms of everyday living, excessive use of the rocking chair may become as detrimental as physical activity may be harmful in active pulmonary tuberculosis. Contrariwise, graduated or regulated exercise favors the resolution of intercurrent pulmonary infections and facilitates normal body functions; it should be recommended with the first lessening of the acute episodes. Rest should be employed only in conditions in which physical inactivity is definitely indicated, e.g., tuberculous and cardiac cases with coronary disease and circulatory failure. Gymnastics, with deep breathing exercises, employed on rising from bed in the morning, are sometimes valuable as a means of improving the general condition and certainly in favoring adequate ventilation of the lungs; holding the abdomen from below upwards is sometimes useful. Fatigue and chest discomfort with increased pulse and respiratory rates call for limitation of activities; stair climbing and rapid walking, especially against the wind, should be avoided. With evidence of circulatory embarrassment in moderately advanced silicosis, modification of the program of exercise is indicated.

The value of drugs in emphysema is disappointing, as mentioned previously. The expectorant and sedative drugs usually are more disturbing than effectual; codeine favors the retention of secretions and should be used only for severe, uncontrolled, racking cough. In failure of the circulation due to primary myocardial disease, digitalis and theobromine derivatives are indicated. Oxygen therapy may be of distinct value. Mercuhydrin, a mercurial diuretic, given intramuscularly in doses of 2 cc. once weekly, is sometimes useful in controlling edema. Aminophyllin .2 Gm. may be administered effectively in cases of persistent bronchospasm associated with coronary disease. The antibiotic drugs are useful in acute infections, penicillin and terramycin being the most effective in the nontuberculous types and streptomycin most valuable in the tuberculous. Parenteral administration of the antibiotics is preferred; it should be employed in combination with intermittent positive pressure breathing therapy. In the management of obesity, a dietary regimen providing an increased protein intake with minimum fat, the elimination of bread and pastry, and the administration of dextrose lozenges 2 Gm. beginning one hour after breakfast and lunch, and stopping one-half hour before these meals, provide energy, sufficient calories and accessory food constituents while favoring a satisfactory loss of weight.

The inhalation of aluminum dust has been tried experimentally and advocated clinically for a number of years. According to Orenstein,[1] Kettle, King and others have observed that the action of silica may be inhibited in a test tube, and Gardner found that protection against silica may be induced by the inhalation of aluminum. Referring to studies on prevention by Denny, Robson and Irwin, Orenstein observes that critical evaluation of the effects of aluminum is awaited with interest in England and elsewhere.[8] Hannon[9] considers that the action of aluminum may be expected in the early cases with limited conglomeration of the silicotic bodies.

Intermittent positive pressure breathing treatments as employed with the pneumatic balance type of respirator and the introduction of oxygen and bronchodilator drugs (isuprel, vaponefrin, and neosynephrine) provide a form of respiratory exercise in relieving bronchospasm which facilitates the passage of air in and out of the lungs and favors the discharge of inspissated mucopus from the air sacs and bronchioli; oxygen alone is effective in pulmonary congestion.[10,11] The mechanism operates under a line pressure of 20 cm. of water and produces (1) a small decrease in cardiac output, (2) a very slight increase in the blood pressure in the systemic arteries, right ventricle and pulmonary ventilation and (3) a moderate degree of hyperventilation (6 to 10 liters per minute). The increased oxygen mean pressure gradient between alveoli and arterial blood, one of the outstanding impairments of silicosis, is significantly reduced during pressure breathing. With the uniform aeration of all alveoli the following changes occur: (1) a decrease in the oxygen transfer gradient (alveolus to arterial blood), (2) an increase in the arterial pO_2 and (3) an increase in the oxygen saturation. Treatments are given two or three times daily, the periods varying from fifteen to twenty minutes, depending on the patient's comfort and reaction. The dose of isuprel and vaponefrin is 8 drops of a 1 per cent solution, and that of the neosynephrine is 16 drops of a 1 per cent solution diluted in 1 cc. of normal saline. With undue palpitation sometimes occurring with isuprel, it is desirable to reduce the dose to 4 drops and add 6 drops of vaponefrin. The aerosol is introduced slowly during the period of pressure breathing. In a few cases, compressed air has been substituted for oxygen but the results have been less satisfactory, palpitation sometimes having been observed, with inverted T waves in the electrocardiogram. The combined use of helium and oxygen apparently offers no definite value over oxygen alone. There has been limited experience with the use of non-ionic surface-acting or "wetting agents", including Ceepryn. These preparations, added to the aerosol in doses of 4 drops of a 1-1000 solution, are intended as a means to influence the expectoration of mucus. The course of intermittent positive pressure breathing treatments should extend from three to five weeks, followed by two or three treatments weekly for about one year.

Diaphragmatic elevation, as obtained from the use of a special type of abdominal support, has been of value in facilitating bronchial drainage and providing a more effective movement of air in and out of the lungs.[12] The results have been most striking in cases with the long type of chest and in minimal or moderately advanced silicosis presenting hard, racking cough, difficult expectoration and dyspnea; occasionally, the immediate effects of intermittent pressure breathing have been accentuated. Certain coal miners have remarked that they seem to "breathe less dust" while using the diaphragm lift, which can be explained possibly on the basis of a reduced "down-draft" due to lessened "vertical breathing". The mechanism is related to abdominal compression which displaces the diaphragm to higher levels of function. In a sense, the diaphragm moves within the range of expiration instead of at the lower and less efficient levels of inspiration. Physiologic testing indicates that while the vital capacity is decreased, there sometimes is a reduction of residual air, favoring respiratory function. With prolonged use, faulty habits of breathing are corrected; for example, the preponderant vertical movements of abnormal breathing are lessened in favor of the more desirable thoracic movements.

In the present consideration there has been an attempt to trace the "loose ends" of the silicosis problem. An important question arousing critical interest at the present time relates to the significance of the extensive pulmonary alterations in association with minimal or no clinical manifestations. Are the massive alterations of so-called third stage silicosis true silicosis? Or are they the expressions of complex structural disease influenced by infection and disturbed pulmonary function? It would appear in certain cases that the secondary processes superimposed on silicosis outstrip the fundamental disease in causing variable signs and symptoms. Significantly, the x-ray, which long has been accepted as the unquestioned criterion for establishing the presence and extent of silicosis, is not recognized with the same degree of confidence as previously. It is also a fact that the coal miner, regardless of the degree of silicosis, is plagued with the same aging processes of the lungs and circulation that affect

all men, and these undoubtedly accentuate both the basic silicosis and the secondary pulmonary processes. Obviously, the participating influences of aging tissue must be considered, as in the case of infection superimposed on silicosis. Accordingly, treatment should be based on the concept that a variety of pulmonary conditions and disturbances may contribute significantly to the causation of symptoms. The control of dyspnea is obtained through a form of respiratory exercise with bronchodilator drugs induced with intermittent positive pressure breathing; sustained relief is accomplished by the continued use of pressure breathing, gymnastics and regulation of the general body processes. The rocking chair, the Old Men's Home and obesity are not helpful to the silicotic individual and should be avoided. While silicosis must be considered generally as a progressive, disabling condition, a dynamic approach should be employed with reference to rehabilitation of impaired pulmonary tissue. Hospitalization for treatment should be reserved for the advanced cases with complications.

SUMMARY

1. The ancient and modern history of silicosis is reviewed with special reference to the factors involved in the development of clinical manifestations and structural disease.

2. The influences participating in the alternate occurrence and disappearance of physical signs and symptoms (episodes) are discussed.

3. The use of intermittent positive pressure breathing treatment is suggested as a means of improving the function of disabled pulmonary tissue.

Acknowledgment is made to Dr. Hurley L. Motley for his valuable suggestions on the physiologic aspects of silicosis.

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THE COMMON COLD

Between childhood and old age, including the decades of greatest productivity of humans, the common cold is a constant and serious menace to health. It has been estimated that among the 60,000,000 presently employed persons in this country, each one is absent from two to three days on the average annually because of colds.

If the average income of workers were $6.00 per day, the total yearly wage loss would be $1,080,000,000. This does not include loss in production, suffering and mental anguish or contagiousness of workers' disease to members of their families and other associates.

Among the 60,000,000 workers of this country, there is much worry resulting in inefficiency when serious colds and their complications attack and incapacitate members of their families. When the common cold with all of its ramifications is considered among the approximately 150,000,000 people of this country, its cost is staggering.

Numerous attempts have been made to devise methods of preventing the common cold such as the employment of vaccines, but nothing has yet been found to materially reduce the onslaught of this disease.—J. A. M. in Diseases of the Chest.

RHEUMATIC HEART DISEASE AND EMPLOYMENT

A knowledge of the natural life history of rheumatic heart disease is essential for the proper evaluation of the affected individual, either in the pre-employment examination, or in the follow-up observation of the employee. In this light, the recently published statistics of Wilson and associates, based upon a 30-year study of 1,042 children, are illuminating.

It is apparent that the severe cases of active carditis succumb either early in childhood or at puberty. Of those that reach early adult life, it is strikingly evident that 90 per cent of those in the age group 20-44 are able to carry on normal activity without disabling cardiac symptoms.

As stated, morbidity due to rheumatic heart disease is low after puberty—the average annual rate of recurrence after this period being as low as three per cent. An affected child has four chances out of five to survive childhood (to age 10), three out of four to survive puberty, and 19 out of 20 to survive early adult life. The overall chance to survive to age 40 is one out of two.—Benedict R. Harris, M. D., in Industrial Medicine and Surgery.

The best way to make your dreams come true is to wake up.—J. M. Power.

WEST VIRGINIA'S FIRST CAMP FOR DIABETIC CHILDREN

(A Report on Camp Kno-Koma)

By GEORGE P. HEFFNER, M. D., F. A. C. P.
and
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The diabetic children of West Virginia have made another step toward normality by attending a summer camp.[1] Camp Kno-Koma (no coma) was held for one week, August 27 to September 3, 1950, at Camp Cliffside, Alum Creek. Thirty-four children from all over the state attended. There were 15 boys between the ages of 7 and 14, and 19 girls between the ages of 6½ and 14.

The schedule for the typical camp day was:

7 a.m. — Reveille; collection of urine
7:30 — Insulin injections
8:00 — Breakfast
8:45 — Clean-up period
9:15 — Cabin inspection
9:20 — Flag raising
9:30 — Handicraft and riflery
10:30 — Blood sugars; snack
11:00 — Swimming
11:45 — Collection of urines
12:15 — Lunch
1 p.m. — Rest period
2:30 — Handicraft and riflery
3:30 — Snack
4:00 — Swimming
4:45 — Collection of urines
5:15 — Supper
6:00 — Free play
7:30 — Entertainment (movies, magician, camp fire, etc.)
8:15 — Collection of urines
8:30 — Snack
9:00 — Taps

Inspection was made at midnight and at 3 a. m. Rounds were made at midnight by the camp doctor and nurse after the charts were completed for the day.

During the completion of the charts a list of the children who had negative urines at bedtime was kept. On rounds, all children were seen and the presence or absence of cold sweat noted; all were awakened and were asked a few simple questions. The children who were all right would respond quickly but the others would respond sluggishly. When the sluggish children were given lump sugar, they would clear up mentally within a few minutes. Those difficult to awaken corresponded very closely to those found to have negative urines at bedtime. At the 3 a. m. inspection, those given sugar earlier were awakened, talked with, and given more sugar if needed.

On the 3 a. m. round the first few nights, all of the children were awakened. Toward the last part of the camp period the stable children were felt for cold sweating but not awakened. Both rounds were felt to be very important, as three of the four severe reactions which occurred were discovered on these occasions.*

During the camping period the children were placed on weighed diets adhering close to the diets they followed at home. Five different diabetic diets were calculated for the group but it was found that with minor changes only two were necessary. The children were fed the three regular meals a day and, in addition, were given small feedings at 10:30 a. m. and 3:30 p. m., just before swimming, to prevent reactions while in the pool. A slightly larger feeding was given at bedtime.* During the camping period it was found that if this feeding was high in protein the number and severity of insulin reactions occurring during the night were decreased. All but one child gained weight while at camp, the gain varying from one to six pounds.

All insulin doses were changed slightly at camp, due to increased activity and slight changes in diet. The majority were lowered.[2] A few who previously had been on either protamine alone, globin, or two doses of regular insulin, were placed on mixtures of protamine and regular. One was taking no insulin when she came to camp. However, her blood sugar was elevated, she had sugar in her urine, and insulin was started while she was in camp. One had taken insulin given by the doctor in his office once or twice a week, and her blood sugar on fasting and two and one-half hours after breakfast, was normal. Her urine was negative except at one time when there was a trace of sugar. It was felt that this child might not be a diabetic, and recommendations were made for further diagnostic study.

On arrival at camp 17 children had been taking their own insulin at home. During the camping period 15 were taught to give their own injections, so that all but two learned to give themselves insulin. All were shown how to step the sites of injections so as to prevent insulin atrophy. Three were found to have atrophy; one had atrophy in both arms and both midanterior thighs.[3] Three were found to have some hypertrophy of both thighs at the sites of repeated injections.

There were 75 very mild insulin reactions which were controlled by lump sugar, 4 to 8 gm.; one child had eight such reactions and ten children had none. There were 7 moderate reactions which required 12 to 16 gm. of lump sugar. There was one child in severe hypoglycemic

*Procedure modeled after that followed at Camp Firefly, a diabetic camp at Spring Mount, Pa.

shock. This child was sleeping and would not respond to attempts to awaken him; however, there was no cold sweating. Within a very few minutes after 50 per cent glucose was given intravenously he responded normally. One child had twitching and was unable to take lump sugar orally. He was given granulated sugar 32 Gm. and responded in twenty minutes. The other two had convulsive seizures and were given 50 per cent glucose intravenously. Both vomited following the seizures and required a liter of 5 per cent glucose intravenously. One child remained confused for a period of eight hours following the convulsion. Of these three children, two had past histories of severe shocks with convulsions. These three children were placed on dilantin as was another child who had a history of convulsions with severe reactions. None had further trouble while at camp.[4]

There were 26 cases of mild acidosis (acetone in the urine) without symptoms. Two showed acetone in the first urine specimen examined after arrival at camp. The majority of the cases required no additional insulin. Those children who received additional insulin received it in small doses (3 to 8 units of the regular insulin) which relieved the acetonuria. There were three cases of moderate acidosis accompanied by nausea and vomiting. Two occurred in the same child on two different mornings. All three cases were easily controlled with similar small doses of insulin (besides the regular morning dose) and these children were able to rejoin the others on the afternoon of the same day. Blood sugar tests were made on these three children while they were showing acetonuria and the highest reading was 250 milligrams per hundred cc.

Examination with "Acetest" tablets** was made on all urine specimens showing 3 and 4 plus sugar. The results were checked by the nitroprusside method of testing for acetone and were found in every instance to be the same. It is recommended that children or their parents use one of the simple methods of testing for acetone at home and thus discover any incidental mild acidosis before the occurrence of deep coma. The color charts should be closely followed when using these tests.

Each child had two blood sugars, 2½ hours after a meal. The highest was 286 milligrams per 100 cc., and the lowest 57. The urine specimens of two children were strongly positive for acetone, with 4 plus sugar, and each of these two children was given 3 units of regular insulin besides his usual dose in the morning. Both complained within ninty minutes of mild hypoglycemic symptoms. Blood sugar determinations were found to be correspondingly low. Using the Jackson[5] categories, the 34 children at the camp were classified in the following way:

Very good to excellent control	2
Good control	1
Fair to good control	9
Fair control	15
Poor control	6
Possible nondiabetic	1

All fundi were examined and all were negative for arteriosclerotic changes. The liver was palpable in 13 cases, seven of which were in the fair control or poor control groups. All were negative for albumin on the first morning specimen, two showed a trace during the day.

Each child was talked with individually about diabetes. All were informed about reactions, what to do about them, and what might cause them. As a rule, they were well informed about and well adjusted to the disease *per se*.[6] Each child was given two "dog tags", one bearing his name, address and telephone number; on the other was printed: "I am a diabetic, give me sugar, call a doctor." The children were urged to wear these tags at all times. Each child was given also a "Clinitest" set and advised as to the importance of its use.

It was found during the camp period that these children could play and do all the things other children do; however, their day was fuller in that its routine involved four urine specimens, three extra feedings and insulin injections. Also, each child had two blood sugar tests during his week at camp. The children were very cooperative about collecting their urine specimens, learning to give their own insulin injections and, as a rule, following their calculated diets.

At the close of the camp week, all of the campers and as many parents as were present at the time camp dismissed were give verbal accounts of the children's activities while at camp as well as individual diabetic control and blood sugar. In each instance the patient was advised to return to the diet and insulin which he had used just prior to his coming to camp, and to see his own doctor within a week after leaving. A follow-up summary letter was then mailed to each doctor regarding the child's progress while on this vacation week. It was felt, therefore, that regardless of the child's diet and insulin requirements while at camp, the final control at home would not be interfered with.

SUMMARY

It was found that the diabetic camp is well worth while for the child and the parents and

**Generously supplied without charge by the Ames Co., Elkhart, Indiana.

that it gives the doctor an opportunity to learn more about diabetes in children. These children were able to live the same camp life as other children and still have their diabetes controlled.

Very mild and moderate reactions can be easily controlled with small amounts of lump sugar. The severe shocks require intravenous glucose. Reaction occurring during the night can be modified or alleviated by giving a sufficient amount of protein with carbohydrates at bedtime. The midnight and 3 a. m. rounds are most important, and the awakening of the children on the midnight round is extremely important to prevent serious trouble.

Small doses (usually 3 to 8 units) of regular insulin will control an early case of acidosis easily. "Acetest" was used and checked with the nitroprusside test and found to give identical results, it is recommended that one of these simple tests for acetone be used at home to detect mild acidosis.

Because reactions and convulsions frequently occur in the night, diabetic children should be deprived of the privilege of sleeping in double-decker beds.

It was impossible to maintain the children on the same doses of insulin that they had been accustomed to use at home, because of the increased activity and the slightly different diet.

These children knew a great deal more about their disease than they usually are given credit for. Fifteen children were taught to give themselves their own insulin during the one week camp period.

Finally, it should be mentioned that this camp would not have been possible but for the help and cooperation of the following individuals and firms:

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CANCER A PH PROBLEM

Cancer is a problem of the public health. Progress reflected in a greater accomplishment is being made. Anyone who has any acquaintance with cancer in its broad aspects must confess, however, to a feeling of confused bewilderment before the enormity of the problem. Many series of questions for which answers can be found must be asked of Nature and put to study and experiment before our understanding of what cancer is will be more intelligible.

There is however no reason to despair, granted we face the problem squarely. There are prophets of doom within our own midst who suggest that "Cancer may be a way of life." Yes, it may, if we do not seek out silent cancer carriers. There is good evidence to suggest that many visceral cancers are probably of two years' duration when the patient reports to his physicion because of symptoms. This occurrence suggests the necessity of supporting well-staffed Cancer Detection Centers; moreover, the elaboration of screening tests, which can be used in the physician's office to suggest which patients should be submitted to more careful study will lessen the arduous labors of such detection centers.

Every physician must come to look upon himself as playing an important role in cancer detection in his own office, and when it is found that a patient has cancer, he must be told. It is absurd to withhold that information from him. An alerted patient is a cooperative patien.t—Owen H. Wangensteen, M. D., in The Journal Lancet.

METHOD OF ALLERGIC INVESTIGATION*

By FREDERICK C. REEL, M. D.,
Charleston, W. Va.

The allergic disorders have come to represent a larger and larger portion of today's practice and particularly have I noticed this in my work in ear, nose and throat. Every day each of us sees cases in which allergy is or could be the basic factor, yet most of us do not conduct our own allergic investigations. I think more of us should do so, and it is my purpose here today to point out why I think this and to suggest a way in which it can be done.

Allergy is a relatively new field and requires the learning of new terms and the varying of usual technics. Too, some of us feel inadequately prepared on this subject. But as modern medicine has brought us the antibiotics, we have learned to use them and so also in its course of progress, the advancing medical world has brought us new information on the subjects of nasal physiology and nasal allergy. These too we are learning and should be applying. Thus I feel we must adjust ourselves and give our patients the best care we can.

The otolaryngologist in particular is well set up to study the allergic patient suffering from nasal symptoms. He is in a position to make not only the allergic investigation, but also to inspect the nasal membranes and to treat them locally or surgically as the conditions arise. Once the study is completed, the patient often elects to have his own physician give the injections when they are required.

No detailed mention will be made in this paper of the specific allergic diseases and their diagnoses for I am sure all of you are familiar with the various types of acute and chronic allergic manifestations that are found in our field. Occurring in the eye,[1] we find such allergic disorders as dermatitis of the lids and conjunctivitis including vernal catarrh, iritis, iridocyclitis and certain corneal ulcers. The ear may show an external otitis on an allergic basis and, as you know, some cases of middle ear deafness[2] with secretions and some of the other ear disturbances, particularly those marked by transient deafness and recurring tinnitus are also occasionally found to be on an allergic basis. The principal nasal allergies[3] are the seasonal and perennial types of allergic rhinitis. Particularly is the perennial type apt to be overlooked and blamed on sinus infection or on improper winter heating conditions. Sinusitis may be co-existent and, when infection is found, a bacterial allergy should be considered.[13] In some cases, postnasal drainage has an allergy as its cause. Laryngeal edema, allergic bronchitis and asthma all are familiar subjects.

A discussion of the actual procedure, i. e., the mechanics, of an allergic investigation follows.

PROCEDURE

There is first the question of physical equipment which includes space, materials and the assistance of a technician. Little space is needed. A place in which to test the patient, a storage cabinet and an icebox to take care of your materials will suffice. Other materials required include tuberculin syringes, hypodermic needles and a scarifier for the scratch tests, or a 2 or 3 inch straight surgical needle for puncture tests whichever you elect to do. If you prepare your own solutions for concentrates, and if you prepare the patient's vials for treatments, you will need also 5 and 10 cc. rubber-capped vials and a method of autoclaving them.

As for the actual help needed, a technician trained in allergy is fine but I have never been able to secure one; I have had success in teaching a nurse what I wanted done. Records at times become voluminous but must be kept in some detail because of the many facts which will be accumulated over a relatively long period. Letter writing is necessary also and of course your secretary can attend to this.

On the initial visit, the usual history is taken but in more detail. Particular attention must be paid to things the patient suspects and things he comes in contact with whether it arouses his suspicion or not. This includes questions as to where he lives, the farm or the city, nearby industries, vegetation, type of bedding, furniture, rugs, moldiness of the place and the medications used with any degree of regularity. The patient's occupation, association of difficulty with certain seasons or places or buildings, pets in the home, livestock, et cetera, all must be asked about and recorded with the findings. Relationship with other people may be a factor, as the husband coming home from work carrying an allergen in his clothing; likewise his tobacco smoke and all other possible details must be noted. Food likes and dislikes must not be overlooked. Frequently it is helpful to have the patient keep a record of everything eaten for a two-week period. That record is studied in conjunction with the history and skin test and all evaluated in planning an elimination diet when one is indicated. All of these data are essential and should be recorded

*Presented before the joint meeting of the Virginia Society and West Virginia Academy of Ophthalmology, at the Greenbrier, White Sulphur Springs, May 8, 1950.

for reconsideration after testing is completed and the time for treatment to be outlined has arrived.

If it is not definite that an allergy exists, nasal smears may be gotten by having the patient blow his nose into wax paper and then having this transferred onto slides. This method is not as painful as swabbing the nose for secretion. The staining technic according to Dr Hansel[4] is recommended for eosinophils. It is an easily applied technic, and the stained smears are readily examined. In the interim the patient might be tried also on an antihistaminic and the actual testing put off for a more or less indefinite period. But often even after this, there still may be some doubt as to whether allergic testing should be done, particularly if the patient is suspected of having a psychosomatic disturbance. Nevertheless, at this time, psychosomatic or not, testing should be done. Frequently, patients are found clinically sensitive when a diagnosis of allergy could not be proven prior to testing. In the case of the psychosomatic patient it is wise, for once such a study has been completed, the patient is more ready to accept a diagnosis of vasomotor rhinitis. The terms vasomotor rhinitis and allergic rhinitis are not interchangeable. The period of time required for the testing can be utilized by yourself and your technician to become further acquainted with the patient's problem. This is particularly desirable in the case of the patient who is emotionally disturbed. It is so often true that the test-negative patient is not allergic, and yet he certainly requires treatment. This type of patient will be helped tremendously if he can secure an insight into his condition. I would direct you to the work on nondirective history taking.[5, 6, 7, 8, 9, 10] Particularly is this stressed in this region by Dr. John Mitchell of Columbus, Ohio. This is an enormous subject in itself and I urge you to apply it more and more.

Once it is decided that the patient is to be tested the following routine is begun.

In order to facilitate both the immediate and future management of a case, I employ what we call the index sheet. This sheet lists the various things we find necessary to do in any given case: history, examination, psychosomatic checkup, contact history, the allergens for which the patient is to be tested (inhalants, foods, pollens, molds, bacteria and special substances such as chicken feed, barn dust, et cetera). Also listed on this index page are items such as complete blood count, urinalysis, basal metabolic rate, sinus x-ray, chest x-ray and medical consultation. Also included for checking are our forms supplied to patients. These include printed directions for feather control and dust elimination, advice on cosmetics and a sheet of general information on allergy. Finally, on this page, is a place for the post-testing diagnosis and the proposed treatment. This page is used as a check list to show the nurse what tests to make, what literature to supply the patient and finally, a guide to me in handling the case.

As to the method of skin testing, I definitely prefer the puncture test to the scratch test and prefer both to the endermal test for pollens, inhalants and molds. Endermal food tests seem superfluous to me for if food must be checked, diet studies are far superior. The puncture test or the scratch test is far safer to use than the endermal method which has resulted in very serious reactions in some ultrasensitive cases.

The material used for scratch testing or puncture testing is a 1:10 to 1:20 glycerosaline concentrate. One drop is used for a test. This is placed on the previously made scratch or placed on the unbroken skin and then a single puncture is made. The skin of the back is preferable because it is less sensitive to pain and usually is less toughened by exposure. If the endermal test is used, a dilution must be selected according to the potency of the test substance. It is injected at a constant depth and in the same amount for each test, usually 0.05 cc., to raise about a 2 or 3 millimeter wheal.

The scratch and puncture methods are read in 20 to 30 minutes, while the endermal test usually is ready to read in 15 minutes. The diameter of the wheal is measured in millimeters and placed as the numerator of a fraction, the denominator of which is the diameter of the red flare around the wheal. By comparing these reactions to the reaction of an injection of the control solution, the degree of reaction is interpreted. This will be minus, plus minus (which I consider minus) and varying degrees of positive according to your interpretation.

Having completed these tests, the patient is given what we call our NP check list and is asked to indicate his findings. The list is composed of about 50 symptoms which, for the most part, are found in persons of an emotionally disturbed nature. The more symptoms the patient checks (say over a half dozen), the more certain we can be that we are dealing with a psychosomatic disturbance, and not an allergy. With this information at hand, plus the tests, the history, the examination and the laboratory reports, I write down my tentative diagnosis and outline the treatment. The patient is given a brief informative talk on allergy to familiarize him with some phases of his disorder and to secure his cooperation.

If injections of inhalants, pollens, molds or bacteria are indicated, I check the ones to be used. The technician, beginning with quite small dilutions, usually about 1:100,000, titrates[11] these by the endermal method of testing and that strength which gives a bare but definite positive is used for the beginning of treatment. If more than one substance is used, they usually are combined in one vial to reduce the number of injections at one visit.

No attempt whatever is made to build the patient to any predetermined dose level; rather the dose is increased every 4, 5 or 6 days gradually building the patient up, using stronger and stronger concentrations as necessary until he experiences relief. At that time, no further increase in the dose is made; instead, the last successful dose is used at longer and longer intervals in an attempt to maintain the patient in balance. The patient is supplied with a letter indicating something of what was found, particularly among the inhalants and pollens. This is not done for the foods because many patients will take such a list and then proceed to select a very inadequate diet for years to come.

If the diet seems to be a factor, I prefer to follow it along the method suggested by Rowe,[12] and I refer you particularly to his writings. If you are interested enough to go into the subject in detail, you will find his book most helpful.

In order to familiarize the patient further, a sheet of general information is supplied him; following are excerpts that particularly stress some things the patient should be made constantly aware of:

"The completeness with which directions are followed will have much to do with the amount of benefit treatment will give. The following points are in addition to those otherwise given you and are of nearly equal importance.

1. Do not use nose drops, sprays, jellies, inhalers or irrigations.
2. Eliminate dust and feathers according to the instructions supplied. This cannot be overdone, particularly in the bedroom and in any other room in which the patient spends much time or in which dust is formed.
3. Avoid insect sprays, woolen blankets, wooly and fuzzy clothing, toys and perfumes. Avoid animals and furs in general.
4. Use soaps that are not perfumed and when necessary use hypoallergic cosmetics, particularly powder.
5. Do not overeat of any one food and the following in particular are not to be taken excessively: nuts, beans, chocolate, milk, eggs, fish, wheat, tomatoes and citrus fruits.

Occasional or persistent return of allergic symptoms may occur and the following reasons are the common ones.

1. The interval between injections is too long.
2. Contact with large amount of the substance to which the patient is sensitive is a frequent cause. This usually is due to failure to start or to maintain control measures, especially for dust and foods.
3. Sudden changes in the weather.
4. Acute infections in any part of the body.
5. Worry and other emotional disturbances.
6. Overwork, loss of sleep and other factors producing fatigue.
7. Overindulgence in food, alcohol or tobacco even when not allergic to these things."

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THE HABIT OF CONSTANT STUDY

The most important aspect of the continued postgraduate training of a family doctor is the habit of study in the individual involved. The habit of constant study makes the difference between an ordinary or even a good doctor and what the public calls "a real doctor." Finding the time for reading and study in the life of a busy general practitioner is often difficult, but one can find time to do what one wants to do. This habit, once formed, will be productive of rich results as reflected in the individual's daily work.—L. F. Fitchett, M. D., in Delaware State Medical Journal.

MESONEPHROMA

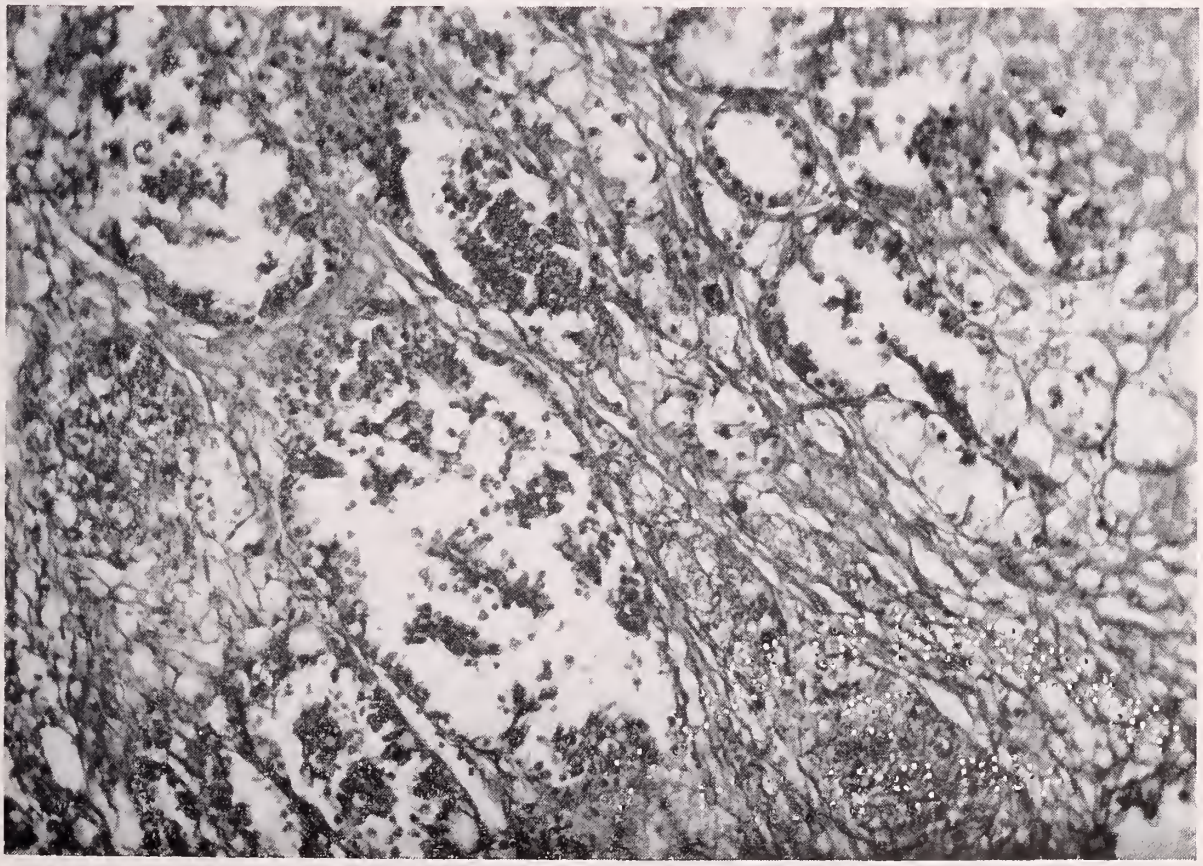
By CHAUNCEY B. WRIGHT, M. D.,
Huntington, W. Va.

That certain cysts and tumors have their origin in the wolffian duct has been generally accepted as factual. Schiller,[1] in 1939, described an ovarian tumor to which he gave the name "mesonephroma." The term "mesonephroma" was suggested because it was thought that the tumor arose from rests of the mesonephron. Histologically, the tumor consists of cystic cavities of various sides lined by cells of an endothelial type instead of an epithelial type as in the cystoma. The tumor contains formations which duplicate the embryonic glomerulus. Schiller reported ten cases and concluded that the tumor must be considered malignant. In 1942 this same observer reported twenty-four additional cases and described the histogenesis of ovarian mesonephroma.

Kazancigil, Laquer and Ladewig[3] reported three cases and suggested the term "papillo-endothelioma". Jensik and Falls[4] claim that there is much uncertainty as to whether or not the tumor justly can be called endothelioma. They are of the opinion that there is a distinct separation between the blood vessels and the actual tumor cells. Popoff[5] discussed certain growths which have been called wolffian epithelioma. He noted the papillary formations but did not describe the cystic spaces.

Stromme and Traut[6] are skeptical of Schiller's explanation of the origin of this group of tumors and prefer the term "teratoid adenocystoma" of the ovary. Jones and Seegar,[7] in 1940 reported six cases and expressed the opinion that the tumor does not show true glomerular bodies. Later they stated that the mesonephric origin of these tumors has not been proven, although the histogenetic hypothesis of Schiller is within the realm of possibility.[8] According to Hardeman and DeGroat,[9] one characteristic of cysts of wolffian origin is the presence of glomeruli and tubules.

The tumor may be benign or malignant and the majority of the cases reported[10] belong to the latter group. It varies in size and there is a tendency to liquefaction. Some parts of the tumor are solid; in others parts multiple cysts are present. The large cysts usually are lined with a single row of flattened cuboidal cells, and may contain clear or bloody fluid. In other areas there is an increase of papillarity, and glomerular-like formations are found. According to Bettin-



Section of well differentiated tumor showing alveoli. The cavities are filled with masses of proliferating cells.

ger and Jacobs,[11] the tumor can occur at any age. In the majority of cases it has occurred in the right ovary. A large percentage of the patients have had extensive recurrence of the growth after surgery and radiation, especially in those cases in which the tumor has shown papillary development and has been more completely undifferentiated.

Case Report.—Mrs. E. C., aged 42 years, was admitted to St. Mary's Hospital on August 11, 1949, complaining of enlargement of the lower abdomen and feeling of heaviness in the pelvis. At times, there was suprapublic pain. Duration of symptoms was ten months. Since illness, menstruation had occurred every two to three weeks and had lasted six to ten days, with flow profuse and painful. She had had two children.

At the age of 35, she had pulmonary tuberculosis and the disease had been arrested since 1943.

Examination of the pelvis revealed a fundus enlarged to the size of a grapefruit, hard, asymmetrical and movable. On August 12, 1949 subtotal hysterectomy and bilateral salpingo-oophorectomy was done.

Pathology: There were multiple myofibromata of the uterus. The left ovary was cystic, parts of which were hemorrhagic. On section, the tissue was highly cellular and showed a well defined tumor made up of closely packed adenomatous structures. There were papillary and acinar gronpings of the epithelial cells.

Diagnosis: Mesonephroma.

SUMMARY

A review of the literature concerning the histogenesis of ovarian mesonephroma has been given, and a case of mesonephroma of the left ovary is reported.

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NEONATAL GLOMERULONEPHRITIS*

By A. C. THOMPSON, M. D.,**
Elkins, W. Va.

Reports of cases of glomerulonephritis in the newborn are uncommon in the literature. Indeed, most observers agree that this entity is rare before the age of 3 years. Of 425 consecutive autopsies on stillbirths, newborns and infants to the age of one year at the Charleston General Hospital there was only one case of glomerulonephritis. In reviewing the hospital records for the past ten years only two cases of acute glomerulonephritis before the age of 3 years were noted, both of which were fatal.

The familial tendency of nephritis was emphasized as early as 1882 by Kidd[1] who reported the incidence of "Bright's disease" in a family, most of whose members had been under his care for many years. The first case was that of a woman who manifested symptoms of nephritis during one of her twelve pregnancies. The children born prior to the onset of her illness were well, but most of those born subsequently were seriously affected. Seven of the twelve died of "Bright's disease" and of the remaining five, two were suffering from the same disease. One of these, a daughter, had five children, two of whom had nephritis. The earliest age of onset of the disease in any of his cases was nine years.

Hellendall,[2] in 1887, discussed the hereditary characteristics of nephritis. He reported a case of the disease in a mother, with onset of symptoms during the seventh pregnancy, and recurrence of symptoms in the eighth pregnancy. These two children died of severely contracted kidneys, the first at two years and the second at 6 months. None of the children born prior to the onset of symptoms in the mother showed any evidence of renal disease. Autopsy findings, gross and miscroscopic, leave no doubt in the reader's mind that there was severe chronic glomerulonephritis. The first child, aged 2 years, had severely contracted kidneys weighing 6 Gm. each (normal 38.4 Gm.). The second child (aged 6 months also had markedly contracted kidneys weighing 4 Gm. each. Hellendall believed the onset of the nephritis to be intra-uterine, concomitant with the onset in the mother. (He admits that the onset in the mother could have been prior to these pregnancies). He reasons that there was no cause for the onset of the disease in these children after birth, that the severity of the contracture of the kidneys indicated that the process was of long standing, and that the

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onset of symptoms was very soon after birth. Whether these cases were true congenital nephritis, one can only speculate; however, without doubt, they do represent the familial tendency of the disease.

Froelich[3] reported the cases of two siblings with chronic nephritis, with onset of symptoms in one at 4½ months and in the other at 14 days. The urine in these cases contained albumin and casts persistently until death at 11 months and 15 months respectively. Autopsy in both cases showed chronic nephritis and contracted kidneys.

In a discussion of the prognosis of infantile nephritis, St. Engel[4] reported a remarkable series of 49 cases (ages not given) of which number 36 were followed for one year. There were no deaths and of those followed for one year, only two (4 per cent) continued to have urinary findings. This is not borne out in the series reported by Rennie[5] comprised of 10 cases of acute nephritis in infants below the age of 16 months with a mortality of 70 per cent. The youngest age was 4 months, with onset of symptoms at 3½ months. At autopsy subacute glomerulonephritis was found. The remaining three cases which came to autopsy showed acute nephritis. The entire series was characterized by persistent edema. This, in part, accounted for the high mortality rate due to infection in the waterlogged tissues. In five of the fatal cases and possibly six, there was pneumonia or enteritis, and in the seventh, cellulitis. The mortality rate of this disease undoubtedly is high in this age group even today; however, with present day antibiotics it probably would not reach 70 per cent, as in this series.

During the past twenty years, there have been reported in the literature a few cases of nephritis probably of intra-uterine origin. Lepage[6] reported a case of hemorrhagic nephritis in a newborn, with necropsy findings. The infant became ill on about the second day of life, passing small amounts of bloody urine. He died on the fifteenth day. There was no explanation for the onset of the "nephritis". At necropsy there was found ". . . extensive irregular mottling of a deep reddish purple color" and "on cut section it was found that the mottling seen on the surface was continued through the kidney substance . . ." "Under the microscope widespread hemorrhage was seen involving both cortex and medulla, but being confined entirely to the interstitial tissues . . ."[6] This is not a description of glomerulonephritis but probably the pathology, to a severe degree, seen secondary to such systemic conditions as enteritis, the acute phase of scarlet fever, et cetra.

Conrad,[7] in 1938, reported 3 cases of neonatal nephritis. All three were normal births following normal antepartum histories. All of them had edema, convulsions and periodic cyanosis, and the urine contained albumin, red cells, pus cells and casts. One of the infants died, but an autopsy was not done.

Weill-Halle and Loewe-Lyon[8] reported a case which they diagnosed as chronic nephritis in an infant of 3 months, due to the ingestion of "lead extract" by the mother during pregnancy in an effort to induce abortion. Their criteria for diagnosis were retarded development, azotemia and urinary casts. There was no edema, and the urine was free of albumin and red cells. One would be hesitant in making a diagnosis of glomerulonephritis on these data.

Montagna and Ausburg,[9] in 1942, reported a case of nephritis in a newborn premature infant. This was characterized by somnolence, anorexia, pallor, dehydration, fever and, later, edema of the lower extremities. Urine on admission at 11 days showed albumin, red cells, pus cells and abundant casts. Death occurred on the 18th day, at home. The mother had advanced tuberculosis and died five days after delivery. The authors attribute the etiology of the nephritis to the absorption of toxins from the tuberculous mother. It is not inconceivable that sensitization to organisms secondarily invading the tuberculous process could have occurred.

The following case report is one of subacute to chronic glomerulonephritis in a newborn dying at 29 days. The diagnosis was not suspected until the microscopic sections of the kidneys were studied. Consequently, no blood chemistry determinations were carried out.

D. R. K., aged 10 days, was admitted to the Charleston General Hospital on September 2, 1948. He was the third child, born 3 weeks prematurely at another hospital, weight 6 pounds, and otherwise aparently normal. Pregnancy had been uneventful for the mother except for a mild sore throat at 6 months, treatment consisting of sulfonamides, with apparent complete recovery. Urine examination at the next monthly prenatal visit was normal as were the preceding ones. The mother and child were discharged on the fifth day. She believed the right eye of the infant to be puffy at that time. The infant did well for a short time, but about the seventh day began vomiting frequently after feedings and soon became edematous. A local doctor was called on the ninth postpartum day and the baby was admitted to the hospital the next morning.

History and Findings of Parents and Siblings.—Father had congenital syphilis, treated at the age of 5 years. Repeated examinations have

shown no evidence of syphilis; however, his serology has remained positive. He served 3 years in the army during the past war. It seemed advisable to determine certain blood chemistry values on the father and on January 15, 1949, the following results were reported: Nonprotein-nitrogen 33 mg.% blood urea nitrogen 9 mg.%, uric acid 2.7 mg.% creatinine 2.3 mg.% Rh type positive.

Mother well. A thorough physical examination January 15, 1949, by one of us disclosed no evidence of renal (or any other) disease. Blood pressure 120/80. Urine examination: Specific gravity 1.004; albumin, negative; no casts, no red cells, no pus cells. Blood count revealed 82% hemoglobin, 4,500,000 red cells, white count 8,500, 64% neutrophils, 32% lymphocytes, 2% monocytes. Blood chemistry values: nonprotein-nitrogen 25 mg.%, blood urea nitrogen 9 mg.%, uric acid 2.6 mg.% creatinine 1.7 mg.%. Rh type negative.

The first child, aged 3 years, is well. Urine examination January 15, 1949 was entirely normal.

The history of the second pregnancy, in 1946, is almost identical to this, the third one. There is, however, no history of pharyngitis nor any other infection during the pregnancy. In the case of this child, also, edema developed at about 2 weeks and the child had periods of cyanosis. The edema was progressive and the child died in a local hospital twenty-four hours after admission, aged one month. No laboratory studies were carried out, and unfortunately, autopsy was refused.

Other than the history of "Bright's disease" in a paternal aunt, the remainder of the family history is noncontributory.

Physical Examination.—Temperature 99F. Moderate generalized edema. Blood pressure determination and funduscopic examination not done. The remainder of the physical examination was not remarkable.

Laboratory Studies.—Blood count: 96% hemoglobin, red cells 4,500,000, color index 1.06, white cells 13,600, 42% neutrophils, 52% lymphocytes, 1% monocytes, 2% stab cells, 3% eosinophils. Repeat count on September 9 and September 16 were essentially the same. Mazzini test negative. Rh positive.

URINALYSES

	9/3	9/5	9/9	9/15	9/17
Reaction	alk.	acid	acid	acid	acid
Albumin	4 plus	4 plus	4 plus	4 plus	4 plus
Casts, hyaline	occ.			occ.	
granular		4-5	3-4		
waxy		3-4	1-2		
Red cells	4-5		1-2	1-2	4-6
Pus cells	5-6	3 plus	3 plus	1 plus	1 plus

Course in the Hospital.—The baby was placed on routine formula, vitamins and penicillin 15,000 units every 3 hours. The weight dropped from 6 pounds, 10 ounces at the time of admission to 5 pounds, 1 ounce. Improvement seemed apparent until September 19 when projectile vomiting developed. Fluoroscopy of the stomach after a barium meal showed moderate pylorospasm. On September 20, the baby was gasping for breath, and his temperature rose to 102 F. rectally. On examination there were dullness and crepitant rales over the left upper chest. His course continued downhill, terminating on Sept. 21, aged 29 days.

Autopsy Findings.—A complete autopsy, including examination of the head, was performed three hours, forty minutes after death, #A 75 (1948). Only the pertinent findings are given:

The body is that of a well developed, emaciated, extremely dehydrated male infant measuring 51 cm. in length and weighing 2280 Gm. The features are pinched and skin turgor is markedly reduced. The anterior fontanel is depressed. The umbilicus is well healed. Both testicles are in the scrotum.

The skin is dry, and subcutaneous fat is almost completely absent.

LUNGS

The pleura is smooth and shiny. The entire right upper lobe and the posterior portions of the right middle and lower lobes, and the posterior portion of the left lower lobe appear bluish-red. The remainder of the lungs is pink. On cut section the darker portions of the lung appear reddish and somewhat firm in the right upper lobe where a slight amount of frothy fluid can be expressed. The rest of the lung is pink and dry. Both lungs float on suspension in fixing fluid.

HEART

There is no pericardial fat. The right ventricle is dilated. The posterior aspect of the heart appears somewhat injected. The epicardium is smooth. The myocardium is pale, brownish-red and measures 0.4 cm. in thickness in the left ventricle, and 0.1 cm. in thickness in the right ventricle. The endocardium is smooth. The valves are unchanged. The pulmonary artery and aorta are not remarkable. The ductus arteriosus is obliterated. The formen ovale is patent.

KIDNEYS

There is no perirenal fat. Capsules strip with ease. Fetal lobulations are present. On cut section, kidneys are pale yellowish-brown, markings

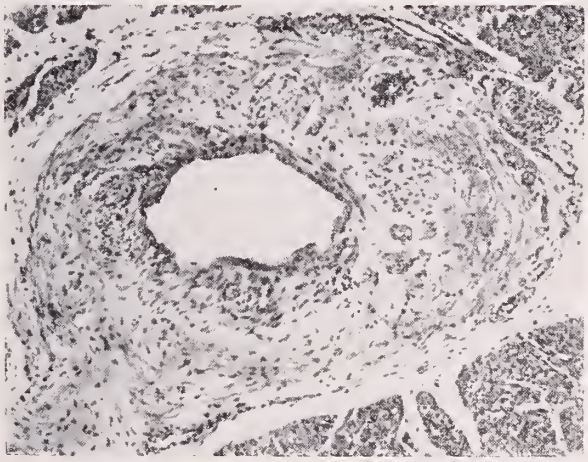
are not very distinct, there is a hyperemic zone between the cortex and medulla. The pelves and ureters are unchanged.

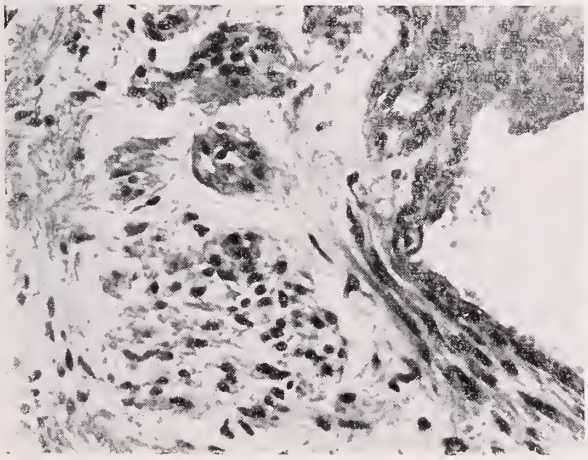
BLADDER

Empty. The mucosa is white and smooth.

MICROSCOPIC DESCRIPTION
HEART

Sections from both ventricles show somewhat larger muscle fibers than normal which in few areas contain some fat droplets. There is some increase of the interstitial fibrous tissue approching the formation of small scars in some areas. The most marked changes show in the coronary branches, especially in the right ventricle. The intima is unchanged. The muscle fibers of the outer portion of the media are partly hypertrophic and somewhat hydropic; they lose themselves into the marked adventitial fibrous tissue which forms a broad mantle and is partly hyalinized (figs. 1 and 2).

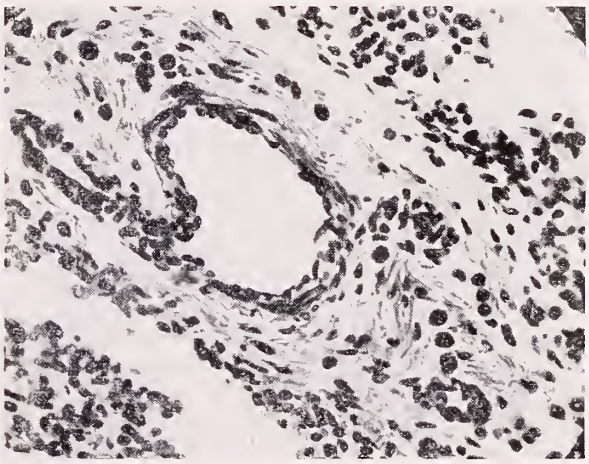




LUNGS

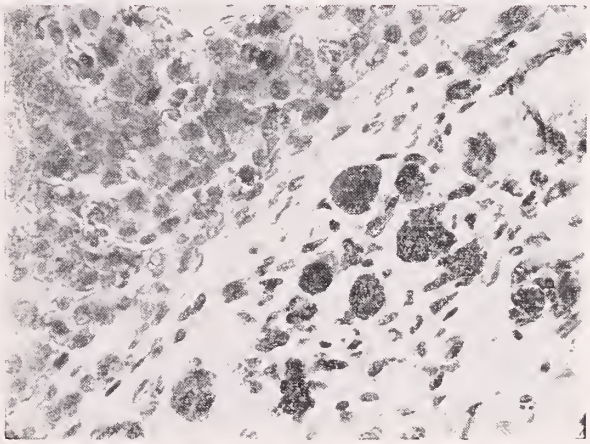
Sections from different lobes show partly distended alveoli with albuminous deposits attached to the wall, partly atelectatic. A few alveoli contain blood and fibrin. There is no pneumonic exudate present. Some alveoli, especially in the atelectatic areas, show phagocytes loaded with neutral fat.

There is no doubly refracting lipoid present. The periarterial fibrous tissue seems increased and in some areas show scattered eosinophils. The blood plasma shows affinity for sudan stain (fig. 3).



LIVER

Some liver cells contain smaller and larger fat droplets. Some show fine greenish-brown pigment granules without affinity to sudan. The nuclei are unchanged. There are no hemopoctic foci. The arteries seem thickened, with increase in muscle cells and edematous loosening of the periarterial fibrous tissue. One large fibrous septum shows small calcareous concretions partly in connection with capillaries, and some lipophilic pigment (fig. 4).



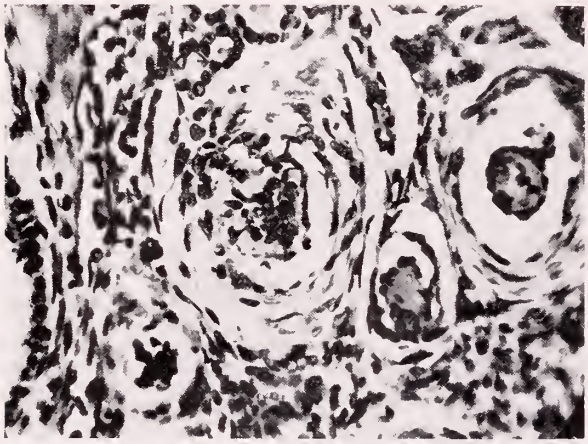
SPLEEN

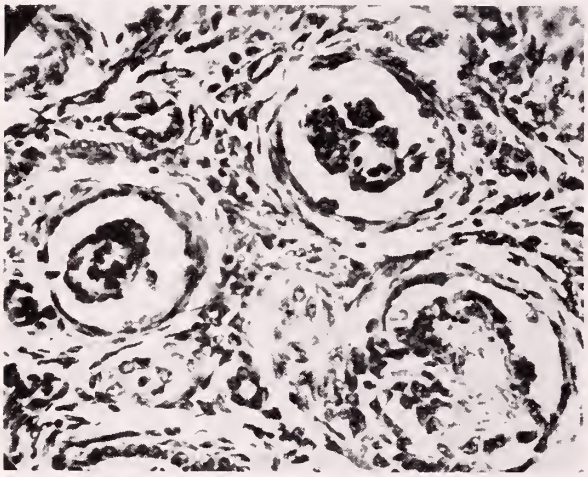
The follicles are small, and the pulpa is somewhat congested. The follicular arteries seem thickened, partly surrounded by increased loosen-

ed fibrous tissue. The muscle cells are enlarged. In some areas the vicinity of the arteries and partly the pulpa show eosinophilic infiltration.

KIDNEYS

Many glomeruli show partial or complete hyalinization, capsular adhesions, capsular half-moons and increased cellularity (figs. 5 and 6).





The cortical stroma is increased and shows some infiltration, partly with eosinophils. The arteries are thickened showing hypertrophic musculature. The proximal convoluted tubules show pale large, partly vacuolized epithelium free of fat and lipoid. The lower tubules partly are cystically dilated by albumin and fatty material, partly containing some casts and leukocytes. The total number of tubules seems reduced.

Gross Diagnosis.—Yellow discoloration of kidneys. Congestion of upper lobe of right lung. Moderate atelectasis of posterior portions of all lobes of lungs. Very marked dehydration.

Microscopic Diagnosis.—Subacute to chronic glomerulonephritis with marked nephrosis, hypertrophy and periarterial fibrosis of coronary, renal and pulmonary arteries, less marked in hepatic and splenic arteries. Slight myocardical hypertrophy and fibrosis. Scattered calcification of hepatic stroma.

DISCUSSION

The microscopic findings indicate diffuse glomerulonephritis of considerable standing, by comparison with the findings in adults one would assume more than four weeks. The unusual findings of muscular hypertrophy and periarterial fibrosis probably are to be explained on the basis of hypertension of some duration. This, as well as the location of the most marked arterial changes in the myocardium of the right ventricle, likewise would point to onset of the disease during fetal life since, at this time, the right ventricle carries a burden at least equal to that of the left ventricle. The calcification in the liver septa is rather out of the ordinary. It may be assumed that uremic retention in connection with prolonged vomiting and dehydration was responsible for it. It is therefore unlikely that this disease was extra-uterine in origin. Rubin,[10] in Mitchell's Textbook of Pediatrics, mentions the occurrence of nephritis in the very young, associated with congenital syphilis. He attributes this not to the spirochetes, but to the result of secondary invaders of syphilitic tissue, especially of the nose. In the present case, there is a history of congenital syphilis in the father, but neither the mother nor the child showed evidence of syphilis clinically or serologically.

Erythroblastosis must be ruled out; indeed, this is the diagnosis most seriously entertained by the physician in charge. Blood specimens of the father and the mother were sent by us to the Ortho Research Laboratories on Jan. 15, 1949 for recheck of the Rh typing and for antibody titer determination of the mother's serum. The report was: Father, homozygous (Rh_1) positive. Mother, Rh negative, no blocking antibodies. In addition to these data, there were no circulating normoblasts in the blood smear of the baby nor was there anemia or jaundice at this admission, nor jaundice previously. This precludes the diagnosis of erythroblastosis fetalis.

One's attention is readily drawn to the history of pharyngitis in the mother during pregnancy. If this is significant in the pathogenesis, one must assume that the fetus was sensitized via the placenta at the same time, seemingly sparing the mother, as Montagna and Auspurg[9] proposed in their case.

SUMMARY

1. A case of probable neonatal subacute to chronic glomerulonephritis with autopsy findings

is given. The possibility of the same disease in another sibling is discussed.

2. Review of the literature reveals few cases, some of these probably not true glomerulonephritis.

3. Familial occurrence of this disease is not to be denied, the occurrence being apparently more frequent in children born after development of symptoms in the mother.

4. The mortality rate of this disease in this age group is high in the space majority of series of cases reported.

5. Intra-uterine sensitization to organisms in the mother is suggested as the mechanism of pathogenesis.

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GAMMA RADIATION

When the first atomic attacks were made against Japan, gamma radiation became, in the public mind, the main terror of the atomic bomb. More recently it has been relegated and seems to be appreciated now as a minor effect. This is mainly because it has been stated that if one were in the central zone one would be "dead anyway," whereas if one were outside a radius of 1800 yards one would not suffer very serious injury from gamma radiation.

On the other hand, flash-burns have a much longer range. Therefore gamma radiation would not produce so great a number of casualties as would thermal radiation in an attack against an unwarned community. There is now a growing tendency to discount gamma-radiation casualties altogether and instead to concentrate on burns.—The Lancet.

TUBERCULOSIS ABSTRACTS*

TB IN PATIENTS OVER FIFTY

The scope of the problem of tuberculosis in the aged has been brought into increasingly sharper focus by the gradual and wider use of the chest roentgen-ray film as a diagnostic tool. This has taken place since 1930, along with the more wide-spread use of refined methods of sputum examination for tubercle bacilli. These methods have shown an increased number of cases to have clinically significant pulmonary tuberculosis, whereas by reliance upon the old direct sputum smear method many cases would have been "negative" for tubercle bacilli.

To rely upon the history and physical examination alone to diagnose pulmonary tuberculosis in the aged is not enough. Associated pathological conditions and altered physiological functions incident to advancing age have hindered the proper interpretation of physical signs. Many aged persons cough, expectorate, lose weight and complain of fatigue and weakness: accurate differential diagnostic study is necessary to determine the reasons why.

There are two primary working tools to employ in the diagnosis of pulmonary tuberculosis. The examination of pulmonary discharges, obtained by expectoration or use of the diagnostic chest roentgen-ray film. The film must have such technical qualities that it can be given a proper interpretation by a physician of experience.

The finding of tubercle bacilli in the sputum by either concentration or culture method establishes the diagnosis of clinically significant tuberculosis. A chest roentgen-ray film may upon occasion give evidence of such diagnostic finality that pulmonary tuberculosis can be said to be present from that evidence alone. Very often, however, the roentgen-ray shadows are regarded only as possible evidence of tuberculosis infection and further study of sputum specimens is indicated before a definite diagnosis can be made.

One other working tool of diagnostic aid in tuberculosis is the intracutaneous tuberculin test. If a patient gives no response to 0.005 mg. of purified proteoin derivative (P.P.D.) or to 0.1 ml. of 1-100 dilution of Old Tuberculin (O.T.), clinically significant tuberculosis is not present. A positive reaction to either of the testing agents means only that tuberculosis caseous material is present somewhere in the body.

In the treatment of tuberculosis in the aged, most authorities agree that proper nourishment and rest are the basic treatment, rest being employed for its effect upon the heart and the body as a whole. There is less agreement upon the advisability of instituting collapse therapy in older persons with tuberculosis.

Problems Presented by Pulmonary Tuberculosis in Patients Over Fifty, Elfred L. Leech, M. D., F.A.C.P., Annals of Int. Med., August, 1950.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

A virtue and a muscle are alike. If neither of them is exercised they get weak and flabby.—Richard L. Rooney.

The President's Page

The physician members of the Advisory Committee to the Interim Committee, appointed in 1949 by Governor Okey L. Patteson to study the advisability of the establishment of a four-year school of medicine and dentistry in West Virginia, recently appeared before that committee and presented a formal report.

In their report, they concurred with the recommendations of Dr. H. G. Weiskotten, Dean of Syracuse University School of Medicine and Chairman of the Committee on Medical Education and Hospitals of the American Medical Association, and Dr. Wilburt C. Davison, Dean of Duke University School of Medicine, that the school should be established in one of the more densely populated, centrally located areas of West Virginia instead of in a small community on the periphery of the state.

They stated that a central location in a large community would have the following advantages:

(a) A medical diagnostic center for the entire state of West Virginia could be maintained as a part of the school;

(b) Adequate clinical facilities and outside hospital beds would be available;

(c) There would at all times be adequate clinical material available with transportation no problem whatsoever;

(d) Acute medical and surgical cases and obstetrical cases, which constitute the background of a practice, could be observed in sufficient numbers to supply all the needs of a medical teaching institution;

(e) There would be practically no faculty problems, as part-time members of the teaching faculty could be drawn from physicians practicing in the community;

(f) It would be possible to provide postgraduate education for the doctors of the entire state;

(g) The possibility of gifts cannot be ignored, and we believe that a school located in a metropolitan area would draw support from many persons who would not be interested were the school located in a small community at the outer edge of the state; and

(h) The opportunity for instruction in all phases of the practice of medicine would be much greater in a metropolitan area.

We believe that the vast majority of physicians and dentists in West Virginia are in accord with these recommendations.

Frank J. Galvin

President.

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FRANK HOLROYD, PRESIDENT

Dr. Frank J. Holroyd, of Princeton, will, on January 1, without formal installation ceremonies, assume his new duties as president of the West Virginia State Medical Association. He succeeds Dr. Charles E. Watkins, of Oak Hill, who will serve as chairman of the Council during 1951.

Doctor Holroyd has had years of proper training in local, state, and national medical affairs to prepare him the better to discharge the duties of the office he now holds.

We doubt if there is any member of the State Medical Association who does not know the extent of the new president's participation in the work of the State Medical Assiciation during the past several years. He served with distinction for four years as a member of the Council, and has also served as chairman and member of important Association committees.

We believe that Doctor Holroyd's most outstanding work for the profession has been in the field of medical public relations. Officers of the American Medical Association have told us that his qualities of leadership in the National Education Campaign in West Virginia have proved

Frank J. Holroyd, M. D.

to be a source of inspiration to those engaged in similar work in other states.

Besides his work in state and national medical affairs, the new president has taken time to serve as secretary of his local medical society. On January 1, 1951, he will have completed eleven years as secretary of the Mercer County Medical Society.

In the campaign to obtain adoption by organizations of resolutions opposing socialized medicine, Doctor Holroyd and his PR committee, aided substantially by local committees and members of the Woman's Auxiliary, succeeded in placing West Virginia second among all the states in the nation in this important part of the campaign.

Frank Holroyd is a most worthy successor to Charlie Watkins. His main assets consist of personality plus, youthful enthusiasm, and a one hundred per cent interest in all of the affairs of his chosen profession.

With Charlie Watkins serving with the new president as chairman of the Council, and with members of that group who have been chosen on the basis of interest, ability, qualifications, and experience standing solidly behind him, we face 1951 with full confidence that it will prove to be one of the best years in the history of the Association.

A SUCCESSFUL YEAR

We are glad that Charlie Watkins' usefulness as an active officer of the West Virginia State Medical Association will continue for an additional two years. On January 1, 1951, he will automatically succeed Dr. Thomas G. Reed as chairman of the Council, and Doctor Reed will serve during the year as Councillor-at-Large.

Charles E. Watkins, M. D.

Doctor Watkins has accepted every invitation extended to him to speak before county societies and local auxiliaries during the past year. One of his chief assets as the head of the state organization has been his ability to "be himself" under all conditions and circumstances. There is nothing artificial about him, and when he addresses a group, he speaks his mind to the same extent as if he were conversing with but one individual.

That Doctor Watkins has proved to be one of the most popular presidents in the history of the State Medical Association cannot be denied. We are a much better organization for his leadership during the past year, and his effectiveness as an active worker for organized medicine need not be lost with the beginning of the new year, for we are assured that he will continue on the available list for personal appearances throughout 1951.

We will for many years feel the wholesome effects of the "drive" the retiring president has put into medical organization work in this state. We congratulate him upon a year's work exceptionally well done.

ROBERT JEFFREY REED, M. D.

The passing of Dr. Robert Jeffrey Reed, of Wheeling, will be mourned by the medical profession throughout West Virginia. In past years he was a prominent figure at every annual meeting, and was always interested in the affairs of his local medical society. He had a wide acquaintanceship among the doctors in the tri-state area, and until the very end retained a keen interest in all matters affecting the profession.

The Wheeling News-Register, in an editorial which appeared in the issue for November 28, refers to Doctor Reed as "perhaps the last representative of the old school of medicine in this part of West Virginia." We quite agree with the editorial that he "fulfilled a mission given to few of his profession with utmost devotion to those he served."

Doctor Reed was indeed a leader among men, and his love for his profession gave him the urge to continue in active practice until just a short time before his death. We are told that he drove his own car until just a few months ago.

Robert Jeffrey Reed, M. D.

It is to be regretted that the younger members of the profession in this state did not have an opportunity to become better acquainted with Doctor Reed. He was honored by being elected in 1919 as president of the West Virginia State Medical Association, and we shall always remember his great joy when informed in 1944 that his son, Dr. Robert J. Reed, Jr., had been elected to the same office.

At the time of his death he was the oldest past president of the West Virginia State Medical Association.

SOCIALIZED LEGAL AID

The Huntington Herald Dispatch, in an editorial appearing in the issue for November 30, 1950, reports that "proposals for the socialization of medicine in the United States have been followed by the legal profession with more than casual interest."

The reason for this more than passing interest on the part of the lawyers is believed to be due (1) to the impetus in this country of the administration's plan for socialized medicine derived from the British Labor government's socialization of medicine in Great Britain, and (2) to the inauguration of a plan by the British government to help private citizens pay for legal aid and advice.

A description of this service and a discussion of the plan follows in this very interesting editorial:

"The new British system does not offer free legal services to all, as health care is offered under the National Health Service; only those with annual incomes of less the equivalent of $437 to $1,176 must pay part of the cost, the government making up the difference.

"The new system is administered by the Law Society, to which almost all British solicitors belong. It was first proposed by the Society itself in 1944. The authorizing act embodied recommendations of a nonpolitical committee of lawyers and judges appointed by the wartime coalition government and had the support of both Conservative and Labor members of Parliament.

"To many leaders of the American bar the experiment in Great Britain indicates that the legal profession in the United States must increase efforts to see that its services are readily available to all citizens on terms they can afford."

Harrison Tweed, president of the American Law Institute, has warned that: 'The bar must so act as to . . . discharge its responsibility to men and women of all financial conditions. If it does that, the public probably will leave the matter in the hands of the profession for a reasonable period of grace. If not, the matter will become a political issue'.

"Notwithstanding public complaints that lawyers' charges are so high as to put legal services beyond the reach of large numbers who need them, many lawyers themselves have difficulty in making ends meet. Law school graduates find it hard to get places with established firms or to set up in practice for themselves. The resulting anomaly has been described by Supreme Court Justice Jackson as one of 'briefless barristers and lawyerless clients'."

MORE THAN EVER

The Charleston Daily Mail takes the position that if we are ever to have a four-year school of medicine and dentistry in West Virginia, action must be taken now. The Mail heads an editorial appearing in the issue for December 12, 1950, with this statement: "It is too soon to give up on the state's proposed medical and dental school. The need is now greater than ever."

This statement appears in italics, and we would like each and every member of the West Virginia State Medical Association to read and reread it and then communicate again with members of the legislature with the plea that this important matter not be shelved for legislation of lesser importance which might be considered at the session which begins on January 10.

We know that every doctor and dentist in West Virginia will be interested in what the Mail has to say on a subject that has been debated and in which action has been delayed for the past 29 years. The complete editorial which follows the opening paragraph quoted is as follows:

The Legislature's interim committee on the state medical school sounds an ominous note. It has met, deliberated and postponed for one month any decision pending developments in the national crisis. The warning is clear: West Virginia may have waited too long to make up its mind about a medical school. It may now be too late to proceed confidently on the assumption that a medical school can be established whenever the state makes its decision.

There is no denying these conditions which are already out of the state's control. Mobilization, which is rumored, would certainly bring with it a heavy curtailment of all new construction. Both material and manpower will be scarce, and it is easily possible that even such a necessity as a medical school would not qualify under a new system of priorities and allocations. But if this is to be the case, one could wish that the interim committee, instead of postponing a decision on the old problem, had given some attention to the new one.

For the fact remains that in the event of total mobilization or even war the need for a new medical school will be greater than ever. The demand for physicians and dentists is already great enough to cause hardship for many communities. A general draft of both might deprive thousands of families of medical and dental attention. And if the crisis continues, as many of our experts warn, for a decade or a generation the problem of adequate medical attention will become steadily more acute.

On these grounds it is not altogether out of the question that West Virginia's plans for a new medical and dental school could qualify for a top priority in the national planning for defense. On that chance the legislature should be prepared to go as far as the state can go in establishing the new school.

Most people are familiar with the race track built during the last federal prohibition on non-essential building. A medical school, it seems to us, would stand at least an equal chance of meeting with the government's approval.

We heartily agree with everything that has been said by The Mail in its timely editorial. If we are to have a four-year school, within the lifetime of those of us who have completed our education and are engaged in business or in the

practice of a profession, then, regardless of the millions of dollars that will be required to pay the Soldier's Bonus, build primary, junior high, and high schools, and construct more primary and secondary roads during the next few years, action must be had without delay.

Health certainly has top priority. The need for doctors and dentists in the campaign to keep our people healthy is known to every taxpayer in West Virginia. Certainly no member of the legislature has to be "sold" on the great need for a school in which the young men and women of our state may obtain a complete medical and dental education.

It is perfectly ridiculous for anyone to entertain the thought that, with all of our vast wealth, and with the millions of dollars that are spent annually for most anything imaginable, we cannot provide funds to maintain a four-year school.

Too long have we been hearing left-handed compliments on what the medical and dental professions are trying to accomplish in the way of medical education. We believe the time has come when the people of this state, proud of our many accomplishments in the past, will rise and demand that the legislature take some positive action at the regular session in 1951.

We hope some definite action will be taken during the next session for we believe that the 1951 legislature is composed of representatives who have every desire in the world to enact legislation that will help place West Virginia in the forefront of states with a long-range medical educational program. Our hopes for success in 1951 may be realized because more than one-third of the members of the legislature have already pledged support to the establishment of a four-year school of medicine and dentistry in this state.

MARCH OF DIMES

This nation has just come through another tragic polio epidemic. For the third consecutive year, the growing menace of infantile paralysis has swept the country from coast to coast, leaving in its wake more than 30,000 men, women, and children whose lives were changed overnight. Another record has been added to polio's ravages, more than 100,000 cases in three years, the blackest period in the history of the disease. West Virginia has been no exception. As this editorial is is being written (December 12), 371 new cases have been reported to the state health department for the year 1950. This is an increase of 27 over 1949 and the largest since 1940.

How can we stop it? How can we fight it? What can we do about it? To be brutally frank, we can't stop it yet. We must face the fact that there is more polio today than ever before. The disease is more widespread, more communities are being hit, more families need help than ever before. From all recent experience, we cannot again make the mistake of anticipating a "light" polio year. The polio problem has grown to huge proportions, and we must face the problem realistically.

Fortunately there are many ways that we can fight back. Here in West Virginia we have an organization prepared to fight the disease wherever it strikes in any area. The 55 West Virginia county chapters of the National Foundation for Infantile Paralysis is part of a nationwide organization that has been in the thick of the fight against polio since 1938. With funds that have been given to the March of Dimes, these chapters and 2,800 others throughout the nation are bringing the miracles of modern medicine to the bedside of polio patients everywhere. Wherever infantile paralysis strikes, a National Foundation chapter is on the scene, ready to offer financial assistance when it is needed, ready to pay bills for hospitalization, for physical therapy and nursing, for transportation, and other essentials when families cannot meet the cost of these vital elements of polio treatment.

It is said that four out of every five persons stricken by polio need help in some measure from the National Foundation. The cost of care and treatment is far beyond the means of the average family. It can break any one of us. And it has taxed the resources of the National Foundation to the breaking point for the second straight year.

According to T. Sterling Evans, West Virginia State Representative of the National Foundation, March of Dimes contributions during the past two years have paid costs of patient care totaling $47,000. From January 1 to December 1, 1950, eighteen West Virginia chapters used all their local funds and received a total of $83,456 from the National Epidemic Aid Reserve Fund. Fourteen additional chapters now owe West Virginia hospitals, physicians and orthopedic appliance companies more than $40,000 that must be paid from 1951 funds. Chapters have found themselves, in 1950, unable to support the staggering financial load placed upon them by the ever-increasing numbers who need help from the time they are stricken to the time months, even years, later when they have reached a point of maximum recovery.

A breakdown of expenses for the work is very interesting. The cost to our West Virginia Chapters has been largely for care in the acute and early convalescent stages. For the fiscal year end-

ing December 31, 1949, a total of $183,344.23 was expended for patient care (hospitalization, nurses, physical therapy, physicians), $1,121.38 for equipment, $852.28 for short courses for training nurses, physicians and other services, and $1,645.16 for chapter administrative expenses. The work of these volunteer leaders speaks for itself when they can operate 55 Chapters at a cost of less than $30.00 per year for each unit, and still provide the best medical care available for 296 new cases and 234 cases from previous years.

As we get closer and closer to the day when victory over this crippling disease is a reality, we cannot let down for a moment. If we are discouraged by the evidence of rising incidence all around us, we will fail not only those who are stricken today, but the millions of youngsters who will be exposed to the handicap of polio in the future.

What can we do about it? We can place the weapons of polio warfare in the hands of scientists and medical men who are fighting the disease in the front line. We can provide the best available care and treatment for the thousands who can overcome their handicaps if we help them. We can protect our homes and the homes of our neighbors by providing funds so that no boy or girl will be left crippled if a way exists to avoid it.

We can do all those things through the National Foundation for Infantile Paralysis. The money that is given to the March of Dimes will fight polio here in our own state and it will fight the disease wherever it appears until infantile paralysis is wiped from the face of the earth.

CONTINUED MEDICAL EDUCATION

The responsibility for continued medical education rests upon the medical schools, the medical societies, and the board of health. It requires the utilization of all the present methods of postgraduate instruction, plus a determined expansion of facilities already present, especially the utilization of teaching groups from the medical schools and the use of qualified men from the larger non-teaching hospitals.

Further, the placing on tour of some of the important scientific exhibits, the use of the movies, radio and recordings should be expanded and exploited to the fullest extent.

Finally, it is of the utmost importance to consider the fact that to be effective, continued medical education must be brought to the general practitioner at a place and time that will conserve his time, his finances and above all, his energies—energies so needed for the arduous duties of his ever-busy day.—L. F. Fitchett, M. D., in Delaware St. Med. J.

GENERAL NEWS

ASSOCIATION COMMITTEES FOR 1951 ANNOUNCED BY PRESIDENT HOLROYD

Chairmen and members of all standing and special committees of the West Virginia State Medical Association have been named by Dr. Frank J. Holroyd, of Princeton, who assumes his duties as president on January 1.

Changes in Chairmanship

There have been several changes in the chairmanship and personnel of key committees. Dr. John F. McCuskey, of Clarksburg, and Dr. Paul L. McCuskey, of Parkersburg, who have always done effective work in the PR medical field, head the important Public Relations Committee as co-chairmen, succeeding Doctor Holroyd.

The Fact Finding and Legislative Committee, which will function during the regular session of the Legislature which convenes on January 10, will be headed by Dr. Thomas G. Reed, of Charleston. Dr. D. A. MacGregor, of Wheeling, who served as chairman in 1950, remains as a member of the committee. Doctor Reed, a past president of the State Medical Association, is just completing his term as chairman of the Council.

Dr. Thomas Bess, of Keyser, also a past president, will head the Cancer Committee, succeeding Dr. Philip W. Oden, of Ronceverte.

Will Emphasize Medical Education

Medical education is one of the projects that will be emphasized during the coming year, and Dr. Melford L. Hobbs, of Morgantown, will serve as chairman of the Committee on Medical Education. Doctor Hobbs is head pathologist and clinical pathologist at West Virginia University.

Dr. Theresa O. Snaith, of Weston, will serve as chairman of the Committee on Child Welfare, succeeding Dr. R. C. Bond, of Wheeling, who retains his membership on the committee. Members of the committee elected by the House of Delegates in 1950 are as follows: Russell C. Bond, Wheeling; Henrietta L. Marquis, Charleston; Raymond M. Sloan, Huntington; Carl E. Johnson, Morgantown; Harlow Connell, Bluefield; A. A. Shawkey, Charleston; and Marcus E. Farrell, Clarksburg.

Dr. Charles L. Goodhand, of Parkersburg, has been renamed as chairman of the Committee on Maternal Welfare, and the other members elected by the House of Delegates are as follows: M. B. Williams, Wheeling; Charles S. Mahan, Morgantown; J. E. Page, Clarksburg; E. J. Humphrey, Huntington; E. W. McCauley, Bluefield; and W. E. Hoffman, Charleston.

Dr. George P. Heffner, of Charleston, has been appointed to succeed himself as chairman of the Diabetes Committee, and Dr. Ray M. Bobbitt, of Huntington, has been reappointed as chairman of the UMW Advisory Committee. Dr. Ralph J. Jones, of Charleston, will continue as chairman of the Veterans Administration Board of Review.

The Scientific Work Committee, named by the new president during the annual meeting at White Sulphur Springs last summer, is composed of Dr. L. J. Pace, of Princeton, Chairman, and Drs. Cecil O. Post, of Clarksburg, and James L. Wade, of Parkersburg. The committee has already arranged for much of the scientific program that will be presented at the 84th annual meeting at White Sulphur Spring, July 19-21, 1951.

There will be no change in the membership of the Publication Committee during 1951. Members are elected by the Council, and the committee at the present time is composed of Dr. Walter E. Vest, of Huntington, Chairman; and Drs. E. J. Van Liere, of Morgantown; William M. Sheppe, of Wheeling; G. G. Irvin, of Charleston; and R. H. Edwards, of Welch. Doctor Vest is editor of the West Virginia Medical Journal.

The Advisory Board to the Woman's Auxiliary, heretofore named by Doctor Holroyd, is composed of Dr. Charles L. Goodhand, of Parkersburg, Chairman; and Drs. R. J. Reed, Jr., of Wheeling; Ross P. Daniel, of Beckley; Elizabeth McFetridge, of Shepherdstown; and William A. Thornhill, Jr., of Charleston.

Will Iron Out Conflicts in By-Laws

Dr. Sobisca S. Hall, of Clarksburg, will continue as chairman of the Committee on Revision of Constitution and By-Laws. This committee will undertake to iron out the conflicts that now exist in the by-laws, and will report necessary amendments at the annual meeting in 1951.

Dr. Hugh A. Bailey, of Charleston, chairman of the DPA Advisory Committee, Dr. N. H. Dyer, of Charleston, chairman of the Syphilis Committee, and Dr. W. P. Bittinger, of Summerlee, chairman of the Tuberculosis Committee, were all reappointed for another term.

Dr. A. J. Villani, of Welch, succeeds Dr. J. J. Brandabur, of Huntington, as chairman of the Industrial Health Committee, and Dr. Ben W. Bird, Jr., of Princeton, succeeds Dr. John H. Trotter, of Morgantown, as chairman of the Committee on Conservation of Vision and Hearing.

Dr. William B. Rossman, of Charleston, will head the Mental Hygiene Committee, and Dr. A. C. Woofter, of Parkersburg, will serve as chairman of the Nurses' Liaison Committee, succeeding Dr. W. Fred Richmond, of Beckley.

Dr. D. A. MacGregor, of Wheeling, and Dr. T. G. Reed, of Charleston, continue as chairmen, respectively, of the WVU Liaison Committee and the Committee on Emergency Medical Service.

Dr. Paul P. Warden, of Grafton, has been reappointed as chairman of the Committee on Permanent Home, and Dr. Richard C. Neale, of Bluefield, succeeds Dr. Harry V. Thomas, of Clarksburg, as chairman of the Committee on Blood Bank.

Standing Committees

The following is a complete list of members of standing committees appointed by Doctor Holroyd:

Cancer: Thomas Bess, Keyser, Chairman; S. G. Davidson, Bluefield; Elizabeth McFetridge, Shepherdstown; J. C. Huffman, Buckhannon; J. P. McMullen, Wellsburg; Philip Oden, Ronceverte; Hugh A. Bailey, Charleston; W. C. Kappes, Huntington; J. E. Wilson, Jr., Clarksburg; Thomas L. Harris, Parkersburg; and H. C. Huntley, Charleston.

Revision of Constitution and By-Laws: Sobisca S. Hall, Clarksburg, Chairman; Walter E. Vest, Huntington; J. N. Jarrett, Oak Hill; Harry Coffman, Keyser; and R. A. Fawcett, Wheeling.

DPA Advisory: Hugh A. Bailey, Charleston, Chairman; H. M. Beddow, Charleston; and Marion L. White, Huntington.

Fact Finding and Legislative: Thomas G. Reed, Charleston, Chairman; D. A. MacGregor, Wheeling; Frank V. Langfitt, Clarksburg; Ward Wylie, Mullens; Guy H. Michael, Parsons; and W. Fred Richmond, Beckley.

Industrial Health: A. J. Villani, Welch, Chairman; Robert C. Lawson, Williamson; H. M. Brown, Belle; Donald R. Roberts, Elkins; and H. M. Beddow, Charleston.

Medical Education: M. L. Hobbs, Morgantown, Chairman; Otis G. King, Bluefield; I. E. Buff, Charleston; Hu C. Myers, Philippi; and J. P. Baker, White Sulphur Springs.

Necrology: Don S. Benson, Moundsville, Chairman; George T. Evans, Fairmont; W. M. Warman, Morgantown; Logan W. Hovis, Parkersburg; and J. H. Wolverton, Jr., Piedmont.

Public Relations: John F. McCuskey, Clarksburg, and Paul L. McCuskey, Parkersburg, Co-Chairmen; E. Lyle Gage, Bluefield; William B. Rossman, Charleston; Clark K. Sleeth, Morgantown; Guy H. Michael, Parsons; L. Rush Lambert, Fairmont; James S. Klumpp, Huntington; and Edward S. Phillips, Wheeling.

Syphilis: N. H. Dyer, Charleston, Chairman; C. A. Hoffman, Huntington; R. O. Halloran, Charleston; W. Carroll Boggs, Wheeling; and Frank S. Harkleroad, Beckley.

Tuberculosis: W. P. Bittinger, Summerlee, Chairman; V. L. Kelly, Jr., Bluefield; William L. Cooke, Charleston; J. N. Reeves, Charleston; George F. Evans, Clarksburg; and Hugh S. Edwards, Beckley.

Conservation of Vision and Hearing: Ben W. Bird, Jr., Princeton, Chairman; A. C. Chandler, Charleston; Charles M. Polan, Huntington; Harry V. Thomas, Clarksburg; and John H. Trotter, Morgantown.

Special Committees

The following special committees have been named by Doctor Holroyd to serve during 1951:

Diabetes: George P. Heffner, Charleston, Chairman; O. H. Brundage, Parkersburg; M. L. Hobbs, Morgantown; Richard V. Lynch, Parkersburg; W. A. Thornhill, Jr., Charleston; and Paul P. Warden, Grafton.

Hospital Relations: Upshur Higginbotham, Bluefield, Chairman; Cecil O. Post, Clarksburg; and Ross P. Daniel, Beckley.

Mental Hygiene Committee: W. B. Rossman, Charleston, Chairman; A. L. Wanner, Wheeling; Charles A. Zeller, Weston; Thomas S. Knapp, Spencer; L. Rush

Lambert, Fairmont; Oscar B. Biern, Huntington; and Clark K. Sleeth, Morgantown.

UMW Advisory Committee: Ray M. Bobbitt, Huntington, Chairman; W. Fred Richmond, Beckley; John P. Helmick, Fairmont; and D. A. MacGregor, Wheeling.

Blood Bank Committee: Richard C. Neale, Bluefield, Chairman; E. E. Myers, Philippi; and Richard N. O'Dell, Charleston.

Permanent Home: Paul P. Warden, Grafton, Chairman; P. A. Tuckwiller, Charleston; Philip Johnson, Fairmont; James G. Ralston, Clarksburg; J. H. Wolverton, Jr., Piedmont; and J. D. Romino, Fairmont.

Nurses' Liaison Committee: A. C. Woofter, Parkersburg, Chairman; P. A. Tuckwiller, Charleston; and George F. Evans, Clarksburg.

VA Board of Review: Ralph J. Jones, Charleston, Chairman; Henry M. Escue, Charleston; and James R. Brown, Huntington.

WVU Liaison Committee: D. A. MacGregor, Wheeling, Chairman; Thomas G. Reed, Charleston; and Frank V. Langfitt, Clarksburg.

Emergency Medical Service: Thomas G. Reed, Charleston, Chairman; Russel Kessel, Charleston; L. Rush Lambert, Fairmont; Ward Wylie, Mullens; and J. J. Lawless, Morgantown.

AMA TO AID MEDICAL SCHOOLS

The American Medical Association has appropriated a half million dollars as the nucleus of a fund to be raised for the aid of the medical schools throughout the nation. Announcement of this action by the Board of Trustees was made by the president, Dr. Elmer L. Henderson, at the meeting of the House of Delegates at Cleveland, December 5.

The chairman of the Board, Dr. Louis H. Bauer, of Hempstead, New York, is authority for the statement that the appropriation is being made from the National Education Campaign Fund "for the aid and support of medical schools which are in need of additional financing."

The funds appropriated will be distributed to medical schools for their unrestricted use in basic training of future physicians.

Doctor Bauer also stated that the Board hopes that its action "will become a stimulus to other professions, industries, businesses, labor groups and private donors to contribute to this very important cause of protecting and advancing the interests of medical education and the public health."

The members of the American Medical Association were urged to make individual contributions and were asked to take the lead in trying to obtain contributions from other sources.

ACCA NAMES NEW SECRETARY

Mr. Pat E. Maloney, of South Charleston, executive secretary of the West Virginia League of Municipalities, has been named executive secretary of the American College of Clinic Administrators. He succeeds Mr. Carl R. Parrish, a member of the administrative staff of the Medical College of Virginia, Richmond, who tendered his resignation several weeks ago.

AMA REDUCES FELLOWSHIP DUES FROM $12 TO $5 PER ANNUM

Fellowship dues in the American Medical Association have been reduced from $12.00 to $5.00 per annum. Such dues are paid by Fellows in addition to the regular dues of $25.00 assessed against each member of the Association.

Fellowship dues of $5.00 for 1951 should be remitted directly to the Membership and Fellowship Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois. Fellowship dues cannot be accepted at the headquarters offices of the West Virginia State Medical Association.

Membership dues of $25.00 in the American Medical Association should be paid by a member to the secretary or treasurer of his local society. The dues will be remitted to the State Medical Association for transmittal, in regular order, to Chicago. AMA dues cannot be accepted at the headquarters offices in Charleston unless transmitted through a component society secretary or treasurer.

The payment of fellowship dues carries with it the right to substitute without additional charge any AMA publication for the Journal of the American Medical Association. Each member of the American Medical Association will be sent the JAMA without extra charge. There can be no substitution of another publication for the JAMA by members. The substitution may be made only by Fellows.

There has always been some confusion concerning the status of members and fellows of the American Medical Association. The payment of membership dues does not carry with it fellowship rights. Applications for fellowship must be approved by the Judicial Council. Fellows have the privilege of participating in the scientific assemblies of the Association, and may be elected to an Association office.

Members of the AMA House of Delegates must have been a Fellow of the Scientific Assembly for at least two years preceding the session of the House in which they are to serve.

There has been no change in the procedure for the payment of dues by honorary members. Members who have retired are not required to pay AMA dues. Those who continue in practice are to pay dues unless such payment constitutes a financial hardship.

MIDWINTER CONFERENCES

The dates of the annual conferences of the West Virginia State Medical Association, including secretaries, public relations, and press-radio, will be fixed sometime early in January. The plan at the present time is to schedule all of these conferences together with the winter meeting of the Council during a two-day period sometime in January.

DR. SWART HEADS SMA SECTION ON SURGERY

Dr. H. A. Swart, of Charleston, was elected chairman of the Section on Orthopedic Surgery of the Southern Medical Association at the annual meeting in St. Louis, in November. He will assume his duties as chairman on January 1.

NEW STATE MEDICAL DIRECTORY

A copy of the second edition of the West Virginia Medical Directory reaches us just as this issue of the Journal goes to press.

The first edition was published in 1940, and the editor and publisher, Dr. Arkie B. Bowyer, of Charleston, has made many improvements in the present edition. The author, who is engaged in practice at Charleston, and is Surgeon General of the Veterans of Foreign Wars, has devoted many months of careful study and investigation in the preparation of the new work. His efforts will be appreciated by all those who have occasion to use a state medical directory to any great extent.

The list of doctors whose names and biographical sketches appear in the directory seems to be complete. The names of the members of the West Virginia State Medical Association are printed in caps, and the names of those who are not members appear in lower case type. This is the same style used in the American Medical Directory and enables one to ascertain at a glance whether or not the doctor is a member of the State Medical Association.

The biographical sketches include information concerning internship, residency, postgraduate training, and former location. In addition, information concerning specialty, membership in other medical societies, and hospital staff affiliation is provided. Former military service of doctors is covered, and in many cases hobbies and political affiliation appear in the sketches.

The directory, which was copyrighted by Doctor Bowyer in 1940, will provide West Virginia doctors with a quick and convenient method of obtaining information concerning members of the profession practicing in this state. The new edition is larger and more compact, well-bound, and contains 258 pages. The publisher informs us that distribution through the mails will start January 1, and all doctors who have made advance reservations for the directory should receive their copies without delay.

AED INSTALLS BETA CHAPTER AT MARSHALL

Alpha Epsilon Delta, national premedical honor society, has announced the installation of the West Virginia Beta Chapter at Marshall College, in Huntington. The chapter was installed November 11, 1950, with the initiation of 15 premedical students, together with six members of the faculty, including Dr. J. Frank Bartlett, dean of the College of Arts and Science.

Dr. Ralph M. Edeburn, professor of zoology and premedical adviser, will serve as faculty adviser of the new chapter.

Dr. Hugh E. Setterfield, professor of anatomy at Ohio State University and national president of Alpha Epsilon Delta, presided at the installation ceremonies. He was assisted by Dr. Maurice L. Moore, AED national secretary, and Dr. Lloyd Gribble, faculty adviser of the West Virginia Alpha Chapter, and other members of that chapter at West Virginia University.

NATIONAL CONFERENCE ON MEDICAL SERVICE

The 24th annual meeting of the National Conference on Medical Service will be held at the Palmer House, in Chicago, February 11, 1951.

NEW OFFICERS ASSUME DUTIES

Dr. Frank J. Holroyd, of Princeton, and all the newly elected officers of the West Virginia State Medical Association will assume their duties on January 1.

Dr. A. R. Sidell, of Williamstown, is the new first vice president, and Dr. J. C. Huffman, of Buckhannon, begins his third term as second vice president. Doctor Sidell is just completing his second term as a member of the Council.

Dr. T. Maxfield Barber, of Charleston, will begin his 24th consecutive term as treasurer.

Dr. Charles E. Watkins, of Oak Hill, retiring president, will serve as chairman of the Council, succeeding Dr. Thomas G. Reed, of Charleston. Doctor Reed continues as Councillor-at-Large.

The members of the Council who will serve during 1951 are as follows:

First District, J. P. McMullen, Wellsburg, and L. Rush Lambert, Fairmont; second, Fred R. Whittlesey, Morgantown, and Hu C. Myers, Philippi; third, E. H. Hunter, Webster Springs, and George F. Evans, Clarksburg; fourth, James S. Klumpp, Huntington, and Athey R. Lutz, Parkersburg; fifth, J. C. Lawson, Williamson, and E. L. Gage, Bluefield; and sixth, D. C. Ashton, Beckley, and Russel Kessel, Charleston.

At the suggestion of Doctor Holroyd, several of the key committees which will function during 1951 have already held organization meetings and have more or less mapped out their programs for next year. A meeting of all of the chairmen of the key committees will be called by Doctor Holroyd for some time during the month of January. The complete program of activities of the State Medical Association for 1951 will be announced by the president after this meeting.

DOCTOR VEST NAMED PARLIAMENTARIAN

Dr. Walter E. Vest, of Huntington, has been named parliamentarian of the House of Delegates of the West Virginia State Medical Association to serve during 1951. The appointment was made by Dr. Frank J. Holroyd, of Princeton, who assumes the office of president on January 1.

Doctor Vest is editor of the West Virginia Medical Journal, and has served for several years as one of the West Virginia delegates to the AMA House of Delegates.

1951 CLINICAL SESSION IN HOUSTON

The annual meeting of the American Medical Association will be held in Atlantic City, July 11-15, 1951. It was announced at the clinical session in Cleveland early in December that the interim meeting next year will be held in Houston, Texas. The dates will be fixed by the AMA Board of Trustees.

NEW DEAN AT MCV

Dr. John B. Truslow, assistant dean at Columbia University College of Physicians and Surgeons for the past four years, has been named dean of the Medical College of Virginia, at Richmond, and will assume his new duties there January 1, 1951.

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Smoothage Therapy in Constipation

ADEQUATE WATER...

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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

THE GREENBRIER TO PROVIDE ROOMS FOR 650 PERSONS AT CONVENTION

Applications for room reservations for the 84th annual meeting of the West Virginia State Medical Association at the Greenbrier, White Sulphur Springs, July 19-21, 1951, will be received by the management there on and after January 1.

A definite number of rooms have been set aside for the use of members of the West Virginia State Medical Association and guests who will attend the meeting; however, the deadline for reservations is July 1 and any surplus from the block of rooms being held for the convention will be released on that date for the use of others who might wish accommodations during the convention period.

Accommodations for 650 persons have been reserved for the members of the West Virginia State Medical Association and guests as follows:

16 single rooms with private bath at $19.00 per day each.

15 suites, consisting of two single rooms with connecting bath, at $18.00 per room.

10 suites, consisting of a double room and a single room with connecting bath, $52.00 each combination.

262 rooms with twin beds and bath, two persons to a room, at $17.00 each person.

All meals are included at the rates quoted by The Greenbrier.

Applications for rooms should be mailed directly to the Reservation Manager, The Greenbrier, White Sulphur Springs, and it is necessary that the date of arrival and departure be specified. It is advisable to give the approximate hour of arrival.

No applications for reservations should be sent to the State Medical Association, as all such applications must be cleared through The Greenbrier.

NO REGISTRATION FEE

There will be no registration fee in connection with the 84th annual meeting of the West Virginia State Medical Association, July 19-21, 1951, at The Greenbrier, in White Sulphur Springs. Part of the special assessment levied against each member by the House of Delegates at the annual meeting last July will be used to defray the expenses of the meeting.

Confirmation of reservations will be made by letter from the management and copies of all letters of confirmation will be furnished to the State Medical Association so that an accurate estimate may be had at all times concerning the number of reservations that have been made.

The program committee is completing arrangements for the scientific program, and most of the spots for the three general sessions have been filled.

All of the sections and affiliated societies and associations are arranging afternoon meetings during the convention. The program committee reports that the Presidential Address will be presented the first night of the convention. An open meeting will be arranged for the second night, and it is hoped that the speaker will be Dr. John W. Cline, of San Francisco, who will be installed as president of the American Medical Association at the annual meeting in Atlantic City next June.

The convention will end with the annual banquet on Saturday evening, July 21.

SS ADVISORY COMMITTEE REPORTS

The availability for military service and the essentiality for continued practice on the home front of approximately 100 West Virginia doctors was considered by the West Virginia State Advisory Committee to Selective Service at a meeting held in Charleston, November 10.

The committee, which was set up by Selective Service, is composed of Dr. Russel Kessel, of Charleston, Chairman; Dr. N. H. Dyer, of Charleston, State Director of Health; and Dr. Roy C. Curry, D. D. S., of Huntington.

At the meeting, the recommendations of the subcommittee composed of a medical doctor from each congressional district, organized in accordance with directives from National Selective Service headquarters, were acted upon and recommendations agreed to concerning the status of West Virginia doctors who registered with their local boards on October 16, 1950.

Several of the doctors who reported under the provisions of the selective service act are serving as interns or residents in hospitals, and the state committee has recommended that all of those so engaged at the present time be permitted to complete their current year before becoming available for military service.

In determining the status of doctors who have registered, due consideration was given by the committee to the needs of communities and industries in the state.

The committee has already submitted reports to local draft boards in which definite recommendations have been made with reference to the availability of doctors for military service; however, no information concerning the committee's recommendations will be made public by the state advisory committee. Such information must be obtained by the doctor from the local selective service board with whom he registered.

Advisory sub-committees for dentists and veterinarians will hold meetings in this state at an early date to determine the status of members of the two groups who registered on October 16. The sub-committees will report to the state advisory committee which, in turn, will report, with recommendations, to the local boards.

The state advisory group for medical doctors heretofore appointed by Dr. Charles E. Watkins, president of the West Virginia State Medical Association, is as follows: Dr. Russel Kessel, of Charleston, chairman; and Drs. L. Rush Lambert, Fairmont; Justus C. Pickett, Morgantown; Sobisca S. Hall, Clarksburg; James S. Klumpp, Huntington; H. C. Hays, Williamson; and C. A. Smith, Beckley.

Posture plays a leading role in preventive medicine; its effects are far reaching. We physicians should pay more attention to it.—J. F. in Ohio St. Med. J.

AMERICAN COLLEGE OF ALLERGISTS

The 7th annual meeting of the American College of Allergists will be held at the Edgewater Beach Hotel, in Chicago, February 12-14, 1951.

The College this year is offering its post-collegiate instructional course on the three days immediately preceding the annual meeting. The course has been arranged with the thought in mind that 10 per cent or more of all the patients in a physician's practice have an allergic component in their complaint.

The faculty will be composed of over twenty-five prominent allergists, and the course has been designed for the physician who desires to learn the basic principles of diagnosis and treatment of allergic individuals and techniques that will be found useful in the management of his patients. The fee for the course, February 9-11, is $35.00.

Full information concerning the course may be obtained from Dr. Fred Wittich, Secretary-Treasurer, American College of Allergists, LaSalle Medical Building, Minneapolis, Minnesota.

A CAMPAIGN WITH CHARACTER

The election last week was a definite setback to the creeping Socialism which has been ravaging this country for the past 17 years. This slap-down, long overdue, came as a result of the disgust and distrust of the electorate concerning both the foreign policy and the domestic policy.

On the domestic side, the results mean a two-year breathing spell, for the medical profession, from the crackpots who want state medicine and the so-called welfare state.

Among the potent factors that won this beachhead was the persistent campaign of education by the American Medical Association, which was conducted along the highest ethical standards, with provable facts and figures; in other words, it had character.—Delaware St. Med. J.

EDUCATION AND MEDICINE

To arguments about medical education there is no end. But in the long run what is taught matters less than those who learn and those who teach. It may be a counsel of perfection, but there should be no difficulty in training good doctors if the same care were taken to select students as the Admiralty takes to select naval officers and if all teaching was given—in school, universities, and hospitals—by those who could inspire as well as instruct.—British Medical Journal.

ACS SPONSORS SECTIONAL MEETING

A Sectional Meeting of the American College of Surgeons, embracing the entire central region of the United States, is scheduled for the Hotel Statler, in St. Louis, January 22-24, 1951. Surgeons, members of the medical profession at large, medical students and hospital personnel are invited to attend all sessions.

Information concerning the interesting program that has been arranged may be obtained from Mr. L. G. Jackson, Director, Department of Public Relations, 40 E. Erie Street, Chicago 11, Illinois.

SUBSTITUTION OF MECHANICS FOR BRAINS

In this age of mechanization there is an increasing tendency to substitute mass production methods for thinking even in the practice of medicine. The medical student is overwhelmed with an avalanche of laboratory tests for this and that. The intern may write a stereotyped history, do a perfunctory physical examination, and then write a series of orders for laboratory work expecting the results from which to tell him what is wrong with the patient.

And too often the young practitioner completes the pattern on an even broader scale. This might be called the "sausage machine technique of medical diagnosis." Some part or parts of the patient are inserted in appropriate openings in the machine—or a machine is inserted in various orifices in the patient, a coin is put in the slot, the crank is turned, and the young physician extends his hand to receive the ticket on which the diagnosis is printed in full—correct to the fourth decimal place. But the practice of medicine does not lend itself well to this technique.

The start of any good physical examination should be a properly taken history. This need not be filled with inconsequential minutia, or consist of asking lists of stereotyped questions, but an intelligent inquiry into the beginnings of an illness and any related causative circumstances. This is chronologically followed through the development of all the various symptoms, arriving at the present condition of the patient, but keeping in mind through it all the chief presenting difficulty of which the patient complains.

The taking of such a history is an art which long practice and a broad clinical experience will greatly expedite and sharply focus. But poor early training, and sloppy and indifferent later performance will largely vitiate it. Dr. Bloodgood, the famous cancer specialist from Baltimore, used to say, "My residents can make as good a physical examination as I, but I can take a better history." It is remarkable to listen to the trained clinician draw from a patient all the salient facts in clear, concise and logical order, turning aside the chaff and irrelevant trivia of a garrulous patient, and at the same time letting the patient tell his story without undue forcing or direction.

Were more stress placed on developing in our medical students the technique of obtaining a good history, and less on the ever pending minutia of highly technical laboratory procedures, these young men would learn to know their patients—Ed. Spalding, M. D., in Detroit Medical News.

DR. HUGH A. BAILEY HONORED

Dr. Hugh A. Bailey, of Charleston, was elected a member of the Southern Surgical Association at the annual meeting held November 5-7 in Hollywood, Florida.

MLB TO MEET JAN. 8-10

The winter meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, January 8-10, 1951, for the purpose of examining applicants for license to practice medicine in West Virginia.

OBITUARIES

ROBERT JEFFREY REED, M. D.

Dr. Robert Jeffrey Reed, 91, of Wheeling, died November 27, 1950, at his home in that city following a short illness.

Doctor Reed was born at Burnsville, Pennsylvania, and received his early education at the West Alexander (Pa.) Academy. He received his A.B. degree from Washington and Jefferson College in 1881, and his M.D. degree from Bellevue Hospital Medical College, New York City, in 1884. He also held an M.A. degree and was awarded an honorary degree of Doctor of Science by Washington and Jefferson College at its 140th commencement exercises in 1941.

He interned at West Penn Hospital, in Pittsburgh, 1884-85, and was licensed to practice in West Virginia in 1885. His specialty was general surgery, and he had had post graduate work in New York City, Chicago, the Mayo Clinic, and numerous clinics in Europe. He practiced in Wheeling for over sixty years, and was a member of the staff of the Ohio Valley General Hospital. He had served as health officer of the city of Wheeling 1878-88, and served as a member of the Wheeling Board of Education for eighteen years.

He was a member of and had served as president of the Ohio County Medical Society. He was a past president of the West Virginia State Medical Association, presiding at the annual meeting in Clarksburg in 1919. His son, Dr. Robert J. Reed, Jr., of Wheeling, served as president of the State Medical Association during 1944.

Doctor Reed was also a member of the American Medical Association and the American College of Surgeons.

Besides his son, Doctor Reed is survived by three grandchildren, Robert J. Reed, III, Dorothy Anne Reed, and Louise B. Reed. Funeral services were conducted at his late home in Woodsdale Wednesday afternoon, November 29, and the body interred in the West Alexander cemetery.

* * * *

JAMES OWEN WILLIAMS, M. D.

Dr. James Owen Williams, 67, of Alderson, died November 4, 1950, in a hospital at Clifton Forge, Virginia. Death was atttributed to cerebral hemorrhage.

Doctor Williams was born at Donald, Nicholas County, and received his academic education in state normal schools. He received his M.D. degree in 1914 from the College of Physicians and Surgeons, Baltimore. He was licensed in 1914, and was formerly located in industrial practice at Ameagle, Dorothy and St. Albans.

He was a member of the Greenbrier Valley Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by three daughters, Mrs. David B. McFadden, of El Paso, Texas, Mrs. Charles D. Fletcher, of Miami, Florida, and Miss Jean Williams, of Alderson; a brother, Walter C. Williams, of Richwood; and two sisters, Mrs. Minnie Brown, of Winfield, and Mrs. Ollie Johnson, of Charleston.

* * * *

BENJAMIN F. BONE, M. D.

Dr. Benjamin F. Bone, 75, of Moundsville, died of carcinoma of the colon, November 21, 1950.

Doctor Bone was born at Mt. Pleasant, Ohio, and received his M. D. degree in 1900 from the Columbian Medical College. He was licensed in West Virginia that year and located at Tunnelton, where he remained until 1907; he practiced in Fairmont in 1908 and then moved to Moundsville, where he continued the practice of medicine and surgery until shortly before his death.

Doctor Bone was an honorary member of the Marshall County Medical Society, the West Virginia State Medical Association, the American Medical Association, and the West Virginia Chapter of the American Academy of General Practice. He was a member of the staff of Reynolds Memorial Hospital, Glen Dale, and the Ohio Valley General Hospital, Wheeling.

WANTED: A GOOD LETTING-ALONE

Someone has suggested that if the "Fair Deal" administration is so insistent on establishing a bureau to improve medical services, it might best create one dedicated to seeing that the medical profession is left alone by the overpaternal government and carpetbagger politicians.

Most doctors are inclined to agree with this hypothesis. We believe that Americans appreciate their traditional democracy, and fear the obvious freedom-strangling effects of socialism in the welfare state pattern.

We further believe there is nothing wrong with medical services that more doctors and voluntary insurance plans won't cure.—W. E. Barstow, M. D., in J. Michigan St. Med. Soc.

TELL THE STORY

Good public relations means many things. In one important aspect it means that physicians should tell the story of medical scientific progress to the public. It is here that a new day may be at hand and it is here that we need an enlightened, progressive brand of thinking. The difficult dilemma is to reconcile two opposite points of view.

On the one hand is the need to have physicians tell the story of the progress of medicine to the public—the social-economic progress and the scientific progress—so that the man on the street will know that the physicians have his interest at heart.

On the other hand is the wise view of the medical profession which frowns upon undue self-exploitation of the individual physician—self-advertising we call it—which might help to foster the unscrupulous doctor who uses publicity, rather than his professional skill, to gain unsuspecting patients.—Kenneth M. Lewis, M. D., in New York Medicine.

No Excuses—The world is not interested in the storms you encounter, but did you bring in the ship?—Anon.

WEST VIRGINIA STATE MEDICAL ASSOCIATION

ANNUAL ROSTER OF MEMBERS

(By Component Societies)

1951

BARBOUR-RANDOLPH-TUCKER

Adelman, S. I. — Philadelphia, (Pa.)
Berkeley, Julius L. — Elkins
Bucher, Samuel — Harman
Bush, A. Kyle — Philippi
Butt, A. P. — Elkins
Condry, R. J. — "
Corton, R. V. — "
Duckwall, Vernon E. — "
Golden, B. I. — "
Goodwin, T. M. — "
Harley, John B. — Terra Alta
*Hamilton, E. M. — Belington
Harper, W. G. — Elkins
Harris, Max — "
Hutton, E. E. — "
Jeffreys, Edna M. — Philippi
Lenox, Cora C. — Philippi
Lenox, John E. — "
Leonard, C. L. — Elkins
Liggett, B. L. — Mill Creek
Lilienfeld, M. Semon — Parsons
Manning, H. J. — Elkins
Martin, Joseph E., Jr. — "
Mauzy, M. C. — "
Michael, Guy H. — Parsons
*Miller, J. L. — Thomas
*Moore, S. G. — Stephens City (Va.)
Moyers, Emmet D. — Norton
Murphy, Franklin B. — Philippi
Myers, E. E. — "
Myers, Hu C. — "
Myers, K. J. — "
Nefflen, L. H. — Elkins
*Owens, H. K. — "
Roberts, Donald R. — "
Seltz, Herman — "
Shafer, Cecil W. — Philippi
Skar, S. J. — Davis
Smith, Robert E. — Parsons
Snedegar, Paul D. — Elkins
Spencer, J. D. — Mill Creek
Storrs, Henry G. — Philippi
Stump, Michael — "
Thompson, A. C. — Elkins
Woodford, J. R. — Philippi
Woodford, T. L. — Belington

BOONE

Ballard, O. D. — Van
Ballard, Wm. R. — Los Angeles, (Cal.)
Barbour, W. L. — Whitesville
Curry, Wyson, Jr. — Madison
Glover, A. E. — "
Harless, W. F. — "
Hill, David H. — "
*Hunter, R. L. — Whitesville
Lewis, A. C. — Seth
Love, Wm. C. — Sharples
MacCallum, O. D. — Madison
Novey, Peter J. — Nellis
Pauley, D. F. — Jeffrey
Scott, J. M. — Madison
Silipo, Anthony A. — Prenter

* Honorary Member

Smith, Harry A. — Huntington
Stoddard, Paul M. — Wharton

BROOKE

Booher, W. T. — Wellsburg
Hegner, H. L. — "
Megahan, C. R. — Follansbee
McGraw, Ralph — "
McMullen, J. P. — Wellsburg
Palmer, J. B. — "

CABELL

Amick, Frederick E. — Huntington
Baber, J. H. — "
Baer, Thomas B. — "
Barrett, Robert S. — "
Beard, H. E. — "
Beckner, W. F. — "
Biern, O. B. — "
Bloss, J. R. — "
Bobbitt, Ray M. — "
Booth, Frank M., Jr. — "
Boso, Clarence H. — "
Bourn, W. D. — Barboursville
Brandabur, J. J. — Huntington
Bray, Wm. E., Jr. — "
Brown, B. F. — "
Brown, F. A. — "
Brown, J. R. — Pensacola (Fla.)
Campbell, O. C. — Hamlin
Carr, Joel F. — Huntington
Carter, J. Marshall — "
Chambers, H. D. — "
Christian, Leo E. — "
Clay, C. Stafford — "
Clemmons, H. M. — Butte (Mont.)
Coffey, Francis L. — Huntington
Cook, J. R. — "
Crews, Howard R. — "
*Crews, A. W. — "
Cronin, D. J. — "
Cummings, M. H., Jr. — "
Curry, R. H. — Barboursville
Daniels, W. F. — Huntington
Davis, Hiram W. — "
Dennison, Robt. R. — "
Dobbs, Lee F. — "
*Dobson, Ross M. — "
Duncan, C. S. — "
Esposito, Albert C. — "
Evans, Edward J. — "
*Ferguson, J. W. — Wayne
Flesher, Geo. T. — Huntington
Folsom, T. G. — "
Ford, C. P. S. — "
Ford, J. C. — "
Frame, Luke W. — "
Frazier, Claude — Ansted
Gang, L. B. — Huntington
Garrett, B. D. — Kenova
Genge, Cole D. — Huntington
Gerlach, E. B. — "
Gibson, A. P. — "
Gribovsky, Emil — "
Guthrie, J. A. — "
Guthrie, W. W. — "

Hamilton, O. L. — "
*Hardwick, Richard — "
Harwood, I. R. — "
Hatfield, H. D. — "
Hatton, Don V. — Oak Hill
Haught, David A. — Huntington
Hayman, J. S. — "
*Hawes, C. M. — "
Heckman, James A. — "
*Hereford, W. D. — "
Hibbard, R. W. — "
Hines, N. F. — "
Hirschman, I. I. — "
Hoback, Florence K. — "
Hodges, F. C. — "
Hoffman, C. A. — "
Hoitash, F. J. — "
Holbrook, Thomas J. — "
Hoover, S. R. — "
Hubbard, J. E. — "
Humphrey, E. J., Jr. — "
*Hunter, W. B. — Coral Gables (Fla.)
Hutchison, J. L. — Huntington
Irons, Wm. E. — "
Johnson, G. D. — "
Jones, A. S. — "
Kappes, W. C. — "
Ketchum, Dorsey P. — "
Klein, H. S. — "
Klumpp, J. S. — "
Levy, Fritz — "
Lusher, H. V. — "
MacCracken, Wm. B. — "
*MacKenzie, A. R. — "
Mackey, W. K. — "
Maguire, Henry F. — "
Marple, F. O. — "
Marple, W. K. — "
Martin, W. B. — "
Matthews, W. E. — "
McClellan, E. E. — "
McClellan, G. O. — West Hamlin
McFarland, T. C. — Huntington
McGehee, M. W. — "
Mills, Woodrow W. — Kenova
Moore, L. J. — Huntington
Moore, M. B. — "
*Moore, T. W. — "
Morris, John F. — "
Morrison, G. C. — "
Mullens, H. S. — Kenova
Neal, W. E. — Huntington
Neal, W. L. — "
Owen, Thelma V. — "
Parsons, W. J. — "
Pearson, John S. — "
Peck, Frank M. — "
Plymale, Clarence H. — "
Polan, Charles G. — "
Polan, Charles M. — "
Politano, V. A. — Milton
Pollock, Bruce H. — Huntington
Porter, W. J. — Wayne
Powell, Lucius L. — Huntington
Ratcliff, G. A. — "
Reynolds, Charles O. — "

*Reynolds, Otis E. ..... "
Richmond, B. B. ..... Beckley
Richmond, L. C. ..... Milton
Ricketts, J. E. ..... Huntington
Rife, J. W. ..... Kenova
Rowley, W. N. ..... Huntington
*Rutherford, A. G. ..... "
Schnitt, Sidney ..... "
*Schuller, F. X. ..... "
Scott, F. A. ..... "
*Shafer, E. E. ..... "
Sherman, John J. ..... "
Silver, Harry ..... Milton
*Sloan, R. M. ..... Huntington
Smith, W. P. ..... "
Staats, Roydice ..... "
Steenbergen, J. H. ..... "
Stemmermann, Marguerite ..... "
Stevens, Richard J. ..... "
Stevens, Sarah L. C. ..... "
Stiles, H. A. ..... "
Stone, John E. ..... "
Stotts, Roscoe ..... Kenova
Strange, W. W. ..... Huntington
Swann, W. C. ..... "
*Taylor, C. T. ..... "
Taylor, I. Ewen ..... "
*Taylor, I. W. ..... "
Terlizzi, C. L. ..... "
Thomas, M. J. ..... "
Thomas, Myrtle M. ..... "
Thomas, Wes C. ..... Delavan (Wis.)
Van Den Bosch, W. R. ..... Huntington
Van de Wetering, R. J. ..... San Diego (Cal.)
Van Metre, R. S. ..... Huntington
Vest, W. E. ..... "
Walden, Geo. W. ..... West Hamlin
Walker, S. P. ..... Huntington
Wayburn, Gates J. ..... "
Weinstein, Stanley Middletown (Ohio)
White, Marion L. ..... Huntington
Wilkinson, R. J. ..... "
Wilkinson, Walter R. ..... "
Willis, C. G. ..... "
Wright, C. B. ..... "
Wylie, R. M. ..... "
Yates, Walter K. ..... "

CENTRAL WEST VIRGINIA

*Allen, S. P. ..... Webster Springs
Almond, Harold D. ..... Buckhannon
Brown, E. S. ..... Summersville
*Brown, H. S. ..... Sutton
*Burton, G. M. ..... Weston
*Burton, S. H. ..... "
Chamberlain, R. L. ..... "
Cofer, J. M. ..... Bergoo
*Cooper, E. R. ..... Spencer
Corder, G. C. ..... Jane Lew
Corder, O. W. ..... Weston
*Cutright, R. G. ..... Buckhannon
Davisson, C. R. ..... Weston
*Deeds, L. W. ..... Buckhannon
*Dodrill, J. B. ..... Webster Springs
Eakle, J. C. ..... Sutton
*Eakle, O. O. ..... "
Echols, J. E. ..... Richwood
Echols, W. E. ..... "
Fidler, A. K. ..... Rock Cave
Fisher, E. L. ..... Gassaway
Fisher, R. M. ..... Weston
Forman, Worth B. ..... Buckhannon
Glasscock, James R. ..... Richwood
Hartman, Ira F. ..... Buckhannon
Hill, G. D. ..... Camden-on-Gauley
Holcomb, C. W. ..... Grantsville
*Hudkins, O. L. ..... Weston
Huffman, J. C. ..... Buckhannon
Huffman, W. W. ..... Gassaway
Hunter, E. H. ..... Webster Springs
Hutchinson, B. M. ..... Sutton
*King, W. P. ..... Weston
Leef, J. L. ..... Richwood
*McClung, James ..... "
McClung, James E. ..... "
McClung, W. D. ..... "
*Morrison, M. T. ..... Sutton
Page, B. L. ..... Buckhannon
Peck, James W. ..... Summersville
Peck, John D. ..... "
Perdue, Maxine R. ..... "
*Rohr, C. B. ..... Alum Bridge
Rusmisell, J. A. ..... Buckhannon
Rusmisell, J. A., Jr. ..... "
Snaith, Theresa O. ..... Weston
*Snyder, George ..... "
Snyder, Thomas M. ..... "
Stalnaker, Guy ..... Glenville
Strickland, L. N. ..... Summersville
Tait, H. Sinclair ..... Weston
Trinkle, E. A. ..... "
*Van Tromp, H. O. ..... French Creek
*Walker, Everett ..... Buckhannon
Watkins, David A. ..... "
Zeller, Chas. A. ..... Weston

DODDRIDGE

Poole, A. ..... West Union
White, R. S. ..... "

EASTERN PANHANDLE

Aldis, Henry ..... Shepherdstown
Appleby, George S. ..... Martinsburg
Armentrout, A. W. ..... "
Bitner, E. H. ..... "
Clapham, R. E. ..... "
Eagle, A. B. ..... "
Fox, M. R. ..... Lake City (Fla.)
Fry, S. Oscar ..... Charles Town
Glenn, Marshall ..... "
Glover, V. L. ..... Martinsburg
Haltom, Wm. L. ..... "
Hendrix, N. B. ..... "
Kilmer, John H. ..... "
Marshall, H. T. ..... St. Louis (Mo.)
Martin, G. O. ..... Martinsburg
McCune, Wm. R. ..... Hedgesville
McFetridge, S. Eliz. ..... Shepherdstown
McIntyre, Donald K. ..... Camp Pickett (Va.)
Morison, G. P. ..... Charles Town
Oates, Max ..... Martinsburg
Oates, T. K. ..... "
Porterfield, M. H. ..... Philadelphia (Pa.)
Power, C. G. ..... Martinsburg
Shaw, D. J. ..... "
Talbott, R. B. ..... "
Tonkin, H. G. ..... Williamsport (Md.)
Van Metre, J. L. ..... Charles Town
Wallace, Wm. A. ..... Martinsburg
Wanger, Halvard ..... Shepherdstown
Warden, W. P. ..... Charles Town
Williams, L. Mildred ..... "
Zepp, E. Andrew ..... Martinsburg

FAYETTE

Bays, A. E. ..... Montgomery
Bilger, F. W. ..... River Forest (Ill.)
Bittinger, W. P. ..... Summerlee
Boone, R. R., Jr. ..... Smithers
*Brugh, B. F. ..... Clearwater (Fla.)
Bundy, W. E., Jr. ..... Richmond, (Va.)
Carter, Eugene S., Jr. ..... Montgomery
Claiborne, W. L. ..... "
Davis, W. B. ..... Rainelle
Dorsey, C. S. ..... Kingston
Frame, Eugene M. ..... Charlottesville (Va.)
Gardner, Charles K. ..... Oak Hill
*Gordon, P. L. ..... Charleston
Guerrant, John S. ..... Beards Fork
Harless, L. R. ..... Gauley Bridge
Hodges, G. G. ..... Mt. Hope
Hresan, M. G. ..... Fayetteville
Hughes, C. B., Jr. ..... Montgomery
Jarrett, J. N. ..... Oak Hill
Jones, E. E., Jr. ..... Mt. Hope
Laird, T. Kerr ..... Montgomery
Laird, Wm. R. ..... "
*Martin, H. C. ..... East Rainelle
Merriam, C. G. ..... Page
Moore, M. A. ..... Longacre
Nutter, E. V. ..... Gauley Bridge
Pantera, Geo. B. ..... Oak Hill
Peck, Clemmer M. ..... Powellton
Peck, R. DeWitt ..... Montgomery
Puckett, B. F. ..... Oak Hill
Saver, Gordon ..... Indianapolis (Ind.)
Sims, Thomas C. ..... Fayetteville
Skaggs, H. C. ..... Montgomery
Smith, G. A. ..... "
Smith, Roger F. ..... Glen Ferris
Snell, Frank B. ..... Montgomery
Stallard, C. W. ..... "
Stallard, C. W., Jr. ..... Alloy
Thompson, E. B. ..... Montgomery
Thompson, J. B. ..... Oak Hill
Troutman, H. F. ..... Logan
Updike, R. A. ..... Montgomery
Watkins, C. E. ..... Oak Hill
Wiseman, Henry A., III ..... Montgomery

GREENBRIER VALLEY

Amick, Andrew E. ..... Lewisburg
Baker, James P. ..... White Sulphur Spgs.
Ballou, Chas. ..... "
Compton, John W., Jr. ..... Ronceverte
Dilley, C. K. ..... Marlinton
Ferrell, A. D. ..... Lewisburg
Ferrell, R. M. ..... "
*Gunning, H. D. ..... Ronceverte
Hall, Wm. T. ..... White Sulphur Spgs.
Hawkins, R. F. ..... Lewisburg
Houck, C. L. ..... "
Jackson, C. C. ..... East Rainelle
Klausman, Wm. A. ..... Rupert
Lanham, A. G. ..... Ronceverte
Leech, J. G. ..... Quinwood
Lemon, C. W. ..... Lewisburg
Lemon, George L. ..... "
Lewis, Richard A. ..... Rainelle
Mamick, Stephen ..... White Sulphur Spgs.
Matney, T. G. ..... Peterstown
McClure, T. R. ..... Marlinton
McFerrin, S. A. ..... Renick
Millman, T. H. ..... Anjean
Myles, W. E. ..... White Sulphur Spgs.
Oden, Philip ..... Ronceverte
Preston, D. G. ..... Lewisburg
Prillaman, P. E. ..... Ronceverte
Strader, H. B. ..... White Sulphur Spgs.
Wall, C. I. ..... Rainelle
Williams, L. ..... East Rainelle

HANCOCK

Bogarad, M. ..... Weirton
Brand, J. M. ..... Chester

---

* Honorary Member

Fisher, J. E. — New Cumberland
Flood, R. E. — Cove Sta., Weirton
Greco, Ray S. — " "
Hall, J. E. — Newell
Justice, E. L. — Cove Sta., Weirton
Kosanovic, F. — " "
McNinch, E. R. — Baltimore (Md.)
Pugh, David S. — Chester
Rigas, George S. — Weirton
Schwartz, L. O. — "
Smith, G. C. — Cove Sta., Weirton
Thompson, J. L. — Weirton
Weller, Eli J. — "
Whitaker, L. A. — "
Whitaker, Theo R. — Cove Sta., Weirton
Yurko, A. A. — " "
Yurko, Leonard E. — " "

HARRISON

Allen, E. Ross — Clarksburg
Allman, W. H. — "
Brake, B. S. — Pt. Pleasant
Brannon, E. H. — Bridgeport
Brennan, J. T. — Clarksburg
Chandler, F. C. — Bridgeport
Coffindaffer, R. S. — Shinnston
*Cruikshank, D. P. — Lumberport
Davis, W. M. — Bridgeport
*Esker, H. H. — Clarksburg
Evans, Geo. F. — "
Farrell, Marcus E. — "
Fisher, C. F. — "
Fischer, Herman — "
Flowers, Earl N. — "
*Folk, John — Bridgeport
Genin, F. G. — Clarksburg
Gilman, Joseph — "
Gocke, Jack T. — "
Gocke, T. V. — "
Gocke, W. T. — "
Gordon, P. E. — "
Grant, Sylvia — Park
Greer, C. C. — Clarksburg
Hall, Sobisca S. — "
Hanifan, R. K. — "
Hewitt, L. B. — Lumberport
*Hill, E. A. — LaHabra (Cal.)
Humphries, R. T. — Clarksburg
Jabaut, S. W. — Shinnston
Jackson, Kenna — Clarksburg
Jarvis, C. C. — "
Kelly, A. O. — Wallace
*Kemper, A. J. — Lost Creek
Kerr, John C. — Clarksburg
Klyza, S. J. — "
*Ladwig, O. W. — Wilsonburg
Langfitt, F. V. — Clarksburg
Linger, R. B. — "
Lough, D. H. — "
Lynch, Richard V., Jr. — "
Marks, A. Robert — "
McClung, James R. — "
McCuskey, John F. — "
*McGuire, J. P. — "
McMillan, M. E., Jr. — Bridgeport
Mills, L. H. — Clarksburg
Neal, L. E. — "
Nutter, R. J. — "
*Ogden, C. R. — "
Page, J. E. — "
Pearcy, C. L. — Salem
*Pendleton, E. — Grafton
Pickens, J. Keith — Clarksburg
Ping, E. C. — "
Pletcher, R. O. — Lost Creek

* Honorary Member

*Post, A. T. — Clarksburg
Post, C. O. — "
*Post, S. H. — Volga
Prickett, D. C. — Lumberport
Ralston, James G. — Clarksburg
Randloph, E. B. — "
Repass, James C. — Lumberport
*Riley, R. M. — Nutter Fort
Ritter, E. E. — Salem
Rose, George W. — Clarksburg
Shore, E. L. — Salem
Slater, C. N. — Clarksburg
Spelsburg, W. W. — "
Strother, W. L. — Salem
Thomas, H. V. — Clarksburg
Tucker, E. D. — Nutter Fork
Walker, Wm. N., Jr. — Bridgeport
Weaver, Andrew J. — Clarksburg
Whisler, H. A. — "
Wilkinson, B. W. — "
Williams, J. F., Jr. — "
*Willis, C. A. — Bridgeport
Wilson, J. E. — Clarksburg
Wilson, J. E., Jr. — "
Wilson, R. S. — "
Wornal, L. S. — Shinnston
Wright, E. B. — Clarksburg
Wright, W. B. — "
Zinn, L. D. — "

KANAWHA

Albrecht, M. — Charleston
Aliff, J. Paul — Charleston
Allen, Joel — "
*Amick, A. L. — "
Anderson, R. L. — "
Agnell, H. W. — "
Bachwitt, David — So. Charleston
Baer, Robt. E. — "
Bailey, Hugh A. — Charleston
Bailey, R. W. — Hurricane
Baldock, H. E. — Charleston
Baldock, W. E. — Columbus (Ohio)
Banks, J. Bankhead — Charleston
Bannen, W. J., Jr. — Dunbar
Barber, D. N. — Charleston
Barber, T. M. — "
Basman, Jack — "
Beddow, H. M. — "
Bergman, John H. — Clay
Bivens, S. L. — Charleston
Black, W. P. — "
Blagg, B. V. — So. Charleston
Blagg, John S. — "
Blake, Thos. H. — St. Albans
Bobbitt, O. H. — Charleston
Bock, Robt. C. — "
Boggs, Hunter — "
Boiarsky, Julius L. — "
Bonar, M. L. — "
Bowyer, A. B. — "
Bradford, Bert, Jr. — "
Brady, A. Spates, Jr. — "
Breisacher, Carl F. — "
Brick, John P. — "
Brown, H. M. — "
*Brown, R. J. — Sutton
Brown, R. L. — Charleston
Buff, I. E. — "
Buford, R. K. — "
Bull, S. W. — Spencer
Burdette, Rex A. — Charleston
Calvert, R. L. — "
Cannaday, J. E. — "
Capito, G. B. — "
Carney, Harry A. — "
Champe, Preston — "

Chandler, A. C. — "
Churchman, V. T. — "
Clark, F. A. — "
Claro, Jos. J. — Clendenin
Condry, John C. — Charleston
Cook, Wm. C., Jr. — "
Cooke, W. L. — "
Cox, L. E. — "
Crawford, R. A., Jr. — "
Crites, John Lee — "
*Davis, E. A. — "
Dawson, R. O. — "
Dent, Duke A. — "
Dickerson, L. A. — "
Dobbs, F. H. — "
Drake, B. M. — "
Duling, M. S. — "
Dunlap, J. L. — Nitro
Dunn, R. H. — So. Charleston
Eckmann, L. M. — "
Elkin, W. Paul — Charleston
Ellison, A. B. Curry — "
Engelfried, C. H. — "
Erwin, F. L. — Burnwell
Escue, H. M. — Charleston
Eves, F. P. — "
Fisher, H. H. — Dunbar
Fleshman, C. M. — Clendenin
Frame, R. I. — Madison
Frank, Ludwig — Charleston
Fraser, Helen B. — "
Frazier, J. W. — "
Gallagher, Mary V. — "
Gearhart, Elmer A. — St. Albans
Gibson, R. E. — Charleston
Glass, H. R. — "
*Glass, W. J. — Sissonville
Glass, W. J., Jr. — Charleston
Godbey, J. R. — "
Gordon, A. T. — Spencer
*Gott, E. Fred — Charleston
Grace, James E. — Chelyan
Gray, James H. — Belle
Grisinger, G. F. — Charleston
Grisinger, Geo. F., Jr. — Miami (Fla.)
Grubb, Geo. L. — Charleston
Hager, J. L. — "
Haley, John B. — "
Haley, P. A., II — "
Hall, Carl B. — "
Halloran, R. O. — "
Hamrick, R. E. — "
Hamrick, R. S. — St. Albans
Harper, Clyde A. — Clendenin
Harper, O. M. — "
Harshbarger, Rodgers W. — St. Albans
Hartford, John J. — Rensford
Hash, John W. — Charleston
Hayes, E. R. — Chelyan
Heffner, Geo. P. — Charleston
Henson, E. B. — "
Henson, Edward V. — So. Charleston
Henson, Waldo C. — Charleston
Herman, Leon — Widen
Hills, H. M., Jr. — "
Hoffman, W. E. — "
Hogshead, Geo. W. — Nitro
Hoke, L. I. — "
Holcombe, V. E. — Charleston
Holt, John A. B. — "
Houck, M. R. — Carbon
Howell, H. H. — Madison
Hudgins, A. P. — Charleston
Hull, E. Q. — "
Huntley, Henry C. — "
Hutchinson, T. H. — Malden
Ireland, R. A. — Charleston
Irwin, G. G. — "

Jackson, Edward ... St. Albans
Jarrell, C. A. ... Charleston
Jarrett, John T. ... "
*Jarrett, L. A. ... Dunbar
Jarrett, Marion ... Charleston
Jones, Ralph J. ... "
Jordan, E. V. ... "
Kammer, A. G. ... So. Charleston
Kessel, C. R. ... Ripley
Kessel, Ray ... "
Kessel, Russel ... Charleston
Ketchum, R. D. ... "
Koenigsberg, Max ... "
Kugel, J. Dennis ... "
Kuhn, Beatrice H. ... "
Kuhn, Harold H. ... "
Lampton, Arthur K. ... "
Lance, V. L. ... Los Angeles (Cal.)
Law, H. D. ... Charleston
Lewis, C. E. ... "
Lilly, Goff P. ... "
Lilly, J. P. ... "
Lilly, Milton J., Jr. ... "
Litsinger, E. A. ... "
Litton, A. C. ... "
Louft, R. R. ... "
Lovejoy, U. C. ... "
Lutz, John E. ... "
MacDonald, K. G. ... "
Mace, V. E. ... "
Mantz, Theodore P. ... "
Marquis, Henrietta ... "
Marquis, J. N. ... "
Matthews, L. B. ... "
McClanahan, Rose H. ... "
McClue, A. E. ... Dunbar
McClure, U. G. ... Charleston
McLaughlin, R. S. ... "
*McMillan, W. A. ... "
McMillan, W. O. ... "
McNamara, R. J. ... "
*McPherson, H. D. ... Eskdale
Mendeloff, M. I. ... Charleston
Mican, H. M. ... "
Milhoan, A. W. ... Nitro
Miyakawa, George ... Charleston
Montague, B. F. ... "
Morison, O. N. ... "
Morrison, John T. ... Washington (D. C.)
Moser, Lyle A. ... Eleanor
Mynes, L. H. ... Charleston
Namay, Elliot M. ... Eskdale
Nelson, George O. ... New York (N. Y.)
Nestmann, Ralph H. ... Charleston
Newhouse, N. H. ... "
Niedermyer, J. W. ... "
O'Dell, Richard N. ... "
Pearcy, Thompson ... "
Peck, Earl M. ... "
Pence, R. E. ... So. Charleston
Peters, J. T. ... " "
Peterson, V. L. ... Charleston
*Phillips, S. H. ... St. Albans
Point, W. W. ... Charleston
Polsue, W. C. ... "
Powell, Charles W. ... "
Preiser, Philip ... "
Price, A. M. ... Madison
Price, R. B. ... Charleston
Pushkin, Willard ... "
Putschar, W. G. J. ... "
Quick, James C. ... Richmond (Va.)
Reed, T. G. ... Charleston
Reel, F. C. ... "
Reeves, J. N. ... "
Revercomb, P. H. ... "
Rice, Wm. R. ... Dunbar
Robertson, G. C. ... Charleston
Robertson, H. L. ... "

* Honorary Member

*Robertson, W. S. ... "
Robins, J. E., Jr. ... "
Robinson, J. H. ... "
Rohr, J. U. ... Sweet Springs
Rosenbaum, George R. ... Charleston
Rossman, Wm. B. ... "
Rucker, J. E. ... "
*Schoolfield, G. C. ... "
Seletz, A. A. ... "
Selman, J. H. ... "
Seltzer, Jos. P. ... "
Seltzer, Leo M. ... "
Sexton, Richard J. ... "
Shamblen, Earle L. ... "
*Shawkey, A. A. ... "
Shepherd, E. M. ... "
Shirkey, W. F., Jr. ... "
Shorter, S. S. ... Ward
Skaff, Victor S. ... Charleston
Skaggs, J. S. ... Knoxville (Tenn.)
Skaggs, J. W. ... Nitro
Slaughter, J. F. ... Charleston
Smith, A. A. ... Clay
Smith, B. A. ... Huntington
Smith, C. B. ... Charleston
Snodgrass, H. W. ... Miami (Fla.)
Souleyret, S. B. ... Cabin Creek
Soulsby, P. C. ... St. Albans
Spector, Horatio A. ... Charleston
Spencer, James T. ... "
Spencer, T. N., Jr. ... So. Charleston
Squire, E. W. ... Charleston
Staats, Charles E. ... "
Starcher, R. C. ... Ripley
Stewart, John A. ... Nitro
Stewart, W. C. ... Charleston
Stoeckel, Catherine R. ... "
Stoeckel, J. Edwin ... "
Stork, A. Robert ... Logan
Summers, R. R. ... Charleston
Swart, Howard A. ... "
*Thompson, H. G. ... "
Thornhill, W. A., Jr. ... "
Tuckwiller, P. A. ... "
Tully, C. Carl ... So. Charleston
Vaughan, E. O. ... St. Albans
Vial, H. R. W. ... So. Charleston
Wallace, Richard C. ... St. Albans
Ward, Harold W. ... Charleston
*Watts, C. N. ... "
Webb, R. L. ... "
Whiteside, C. T. ... Kayford
Wilkerson, W. V. ... Highcoal
Wilson, A. A. ... Charleston
Wilson, W. B. ... "
*Wilson, W. H. ... St. Albans
Wise, Fred E., Jr. ... Cabin Creek
Wohlford, R. F. ... So. Charleston
Woodall, R. E. ... Charleston
Work, W. F. ... "

LOGAN

Altizer, A. E. ... Accoville
Ashcraft, John R. ... Holden
*Aultz, L. L. ... Omar
Bevauqua, W. A. ... New York (N. Y.)
Brewer, W. E. ... Logan
Brown, Lee B. ... Charlottesville (Va.)
Chillag, Erwin R. ... Holden
Combes, L. G. ... Holden
*Davis, C. A. ... Logan
Deason, V. A. ... "
*Farley, H. H. ... "
French, A. M. ... "
Greene, Joseph L. ... "
Hagan, Chas. H., Jr. ... Holden
Hamilton, W. P. ... Chapmanville
Hrutkay, W. J. ... Slagle
Jamison, Frank R. ... Logan
Kruger, I. M. ... "

Lawson, L. W. ... "
*Lawson, S. B. ... "
Lyons, J. W. ... Holden
*McClellan, W. T. ... Stollings
McReynolds, Chas. R. ... Man
Mullins, David W. ... Logan
*Parker, W. H. ... Daytona Beach (Fla.)
Patterson, J. L. ... Logan
Roberts, R. W. ... Man
*Round, F. L. ... Holden
Rowan, W. S. ... Logan
Scott, Robt. K. ... Lorado
Smith, B. D. ... Amherstdale
*Smith, T. C. ... Slagle
Starcher, E. H. ... Logan
*Steele, L. E. ... "
Straughan, J. M. ... Amherstdale
Trippett, L. H., Jr. ... Earling
Van Hoose, Harold ... Man
Vaughan, R. R. ... McConnell
Watson, Geo. N. ... Tombstone (Ariz.)

MARION

Bailey, K. D. ... Fairmont
Baron, L. E. ... Mannington
Barr, J. M. ... Worthington
Bressler, David ... Monongah
Carter, C. J. ... Fairmont
Clinton, J. B. ... "
*Collins, J. C. ... "
Criss, H. L. ... "
Ehrgott, Wm. E. ... "
Evans, George T. ... "
Evans, A. Glenn ... "
Fleming, H. C. ... "
Frye, R. R. ... Mannington
Gotses, Paul S. ... Baltimore (Md.)
*Grainger, G. A. ... Farmington
Hamilton, D. D. ... Mannington
Haynes, O. L. ... Fairmont
Helmick, John P. ... "
Hickson, Edward W. ... "
*Holland, C. L. ... "
Holland, E. A. ... "
Jenkins, J. J. ... Farmington
Jenkins, J. J., Jr. ... Fairmont
*Johnson, H. R. ... "
Johnson, Philip ... "
Keister, H. S. ... "
*Kinney, C. L. ... "
Kinney, E. R. ... Idamay
Lambert, L. R. ... Fairmont
*Lawson, C. S. ... "
Lawson, Wm. T. ... "
Mallamo, J. T. ... "
Maxwell, Jos. S. ... "
*Moore, P. G. ... Mannington
Morgan, G. V. ... Fairmont
Norris, L. D. ... "
Nunnally, Wm. O. ... "
*Offner, J. E. ... "
*Orr, W. W. ... Rachel
*Parks, C. L. ... Fairmont
Parks, S. W. ... "
Phelps, M. D., Jr. ... "
Powell, Rupert W. ... "
*Ramage, C. M. ... "
Rogers, F. B. ... "
Romino, J. D. ... "
Smith, D. C. ... "
Sowers, F. F. ... "
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THE MANAGEMENT OF GASTRO-INTESTINAL HEMORRHAGE*

By JAMES O. BURKE, M. D.
Richmond, Va.

INTRODUCTION

The management of gastrointestinal hemorrhage is directed at stopping the hemorrhage and correcting the effects of blood loss while at the same time attempting to determine the site and cause of bleeding.

Patients who have only occult blood loss or small amounts of bright red blood by rectum may be very adequately studied on an outpatient basis; however, a person reporting the vomiting of coffee grounds material or of frank blood, or reporting the passing of a tarry stool should be hospitalized immediately for treatment.

As little as 60 cc. of ingested blood may cause a tarry stool[1, 2] and, of course, less than this quantity may cause a coffee grounds appearance in vomitus.

GENERAL MEASURES

The general measures taken for the patient are well known and, for the most part, widely accepted. Bed rest and sedation appear indicated. The agent used to produce sedation is more often morphine, but there are advocates of the barbituates and of demerol. Atropine should be used in addition to morphine, demerol or the barbituates to depress gastric secretion and motility. Morphine produces vomiting in some subjects but this is less apt to occur among bed patients, and atropine may overcome this tendency. We prefer demerol and atropine. In this regard, banthine, a new quaternary amine, may find a place.

There is some variation of opinion concerning diet. The old starvation regimen is still advocated by some, although Menlengracht and Andersen have influenced the profession to institute early feeding regimens. The importance of feeding is not to be underestimated. It is quite necessary for the maintenance of protein metabolism and aids in electrolyte maintenance. The mortality statistics in various series of cases of bleeding indicates[3] that the starvation treatment should be abolished when possible. As far as peptic ulcer is concerned it is held that the feeding is a natural method of combating the hyperacidity. The various types of alkalies have been discussed. We do not routinely use an alkali unless the patient has discomfort on milk and cream every hour (which is the regimen ordinarily followed). In our own series of cases we have until recently used a Sippy regimen for patients who were not actively vomiting. It appears futile to ask the vomiting patient to eat and we have given them nothing by mouth until nausea and vomiting subsides. It is necessary that the patient on a starvation regimen receive adequate parenteral fluids. These people already have lost fluids and electrolytes, and their general condition will not improve with further dehydration. We prefer glucose with triple chloride solution rather than normal saline.

The use of intravenous fluids is decried by some but Elman,[4] Jones[5] and others have shown that replacement of fluids and electrolytes is essential.

*Presented before the 83rd Annual Meeting of the West Virginia State Medical Association, at White Sulphur Springs, July 27, 1950.

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In an attempt to evaluate topical thrombin we have recently divided our cases as they enter the hospital into one of three treatment groups by rotation. In group 1 the Sippy regimen is undertaken. In group 2 nothing is given by mouth except for topical thrombin and phosphate buffer solution. In group 3 nothing is given by mouth. The latter two regimens are continued only until the patient apparently has stopped bleeding, at which time he is placed on a modified Sippy regimen. As yet we have been unable to determine any difference between the three groups.

Before the patient begins a dietary regimen enough emergency laboratory studies should be done to evaluate the blood loss. In the more serious cases the cross matching of blood for transfusion would, of course, be the first procedure. In order to rule out possible blood and blood vessel diseases we do a complete blood count, bleeding, clotting and prothrombin time, and clot retraction and tourniquet studies.

Regardless of the cause of hemorrhage a patient in shock is transfused if possible. Those opposed to transfusions cite the statistics of Christiansen,[6] also Cullinan and Price,[7] to show an increased mortality following its use. One hears that the blood pressure will be raised too rapidly and that "the clot will be blown out." La Due[8] generally has withheld transfusions except in shock. Crohn and Lerner[9] have used blood in small amounts, as does Andresen.[10]

Massive transfusions have been advocated by Schiff,[11] Stewart,[12] Elman,[4] Dumphy and Hoerr[13], Costello[14] and many others.

The use of blood transfusions is thought to be the greatest single factor in reducing mortality[3] from bleeding of any sort, yet there still is disagreement over the use of blood. Not only may the bleeding patient die from actual shock in a few hours, but the complications resulting from blood and plasma loss may of themselves cause death[15] or a markedly decreased healing time.

Serum nonprotein nitrogen may be a guide to severity of hemorrhage or length of time bleeding has continued, and this is a reflection of renal function which depends on renal blood flow. Prerenal azotemia in these cases must be combatted with transfusions. A neglected observation in connection with these patients is the urinary output.[15] A diminished output immediately signals dehydration or shock, or both. The determination of urine volume and specific gravity will aid also in evaluating hemoconcentration or lack of hemodilution. When a hemorrhage first occurs the blood count is normal. Hemodilution occurs during the next two days, but dehydration may mask or alter this so that the hematocrit may not give a true value of circulating red cell mass. Corcoran and Page[16] have shown that transfusion will restore renal blood flow and function, but that this is progressively less adequate with succeeding hypotensive periods.

DIAGNOSIS OF SOURCE OF HEMORRHAGE

Table I

History:
Family; dyspepsia; bleeding previously.

Examination:
Other bleeding tendency; for cirrhosis.

Tests:
1. Blood count; bleeding and clotting mechanism.
2. G. I. x-ray and fluoroscopy.
3. Castroscopy.
4. Esophagoscopy.
5. Exploratory operation as last resort.

While the patient is being treated as an emergency case, with blood transfusion, or expectantly in the less severe case, certain diagnostic studies are undertaken.

History: A previous history of hemorrhage is helpful in arriving at a diagnosis in some cases of peptic ulcer. A history of dyspepsia suggesting an ulcer is not diagnostic, however, and cirrhosis of the liver also may be present. A family history of bleeding in hemophilia or hereditary hemorrhagic telengectasia may be of value.

Examination: Evidence of bleeding from the mouth or from the rectum in cases of bright red blood by rectum should be sought. A proctoscopic examination should be made if the latter condition is present. Cirrhosis of the liver may be diagnosed by bedside observation, but this does not mean that esophageal varices are the source of hemorrhage. One of our patients had obvious clinical evidence of cirrhosis but was found to have bled from a large gastric ulcer.

Tests: Since the old view of keeping a patient absolutely quiet was for so long the standard procedure for any bleeding, the use of the barium meal x-ray while the patient is bleeding has not been widely accepted. Our reason for wanting early definitive diagnosis is that we believe that some patients should be operated on while bleeding.

We have not hesitated to do a barium meal fluoroscopy and x-ray on all patients as soon as they have recovered from shock. This usually means that the x-ray is done the day after admission to the hospital. We have had one patient faint in the x-ray department but there has been no evidence in our cases that the early x-raying

has affected bleeding whatever. We do take the precaution of not allowing the patient to stand, and the roentgenologist does not use as much force in manipulating the abdominal wall with his heavily gloved hand.

The early use of x-ray for diagnosis in bleeding[17] probably is more efficient than the late use. Some ulcers will heal in a few days so that they will not be seen later; however, this is not a strong argument for using x-ray early. Esophageal varices may be seen at x-ray but a bleeding varix may be collapsed so that it cannot be visualized by barium contrast. When suspected but undemonstrated by barium x-ray, we have seen esophageal varices on esophagoscopy. Other lesions of the esophagus may be the cause of hemorrhage. Some cases of gastric ulcers and of gastritis can be diagnosed only by gastroscopy. We have seen two patients with hemorrhage of consequence from gastritis.

Primarily as a therapeutic measure but in some cases as a diagnostic trial, we have used the Roundtree bag. This is essentially a balloon fixed on a tube so that the balloon may be inflated in the lower esophagus. The balloon is used as a tamponade for a lesion high in the cardia of the stomach as well as the lower esophagus. The tube has a second lumen so that the stomach may be aspirated if necessary, thus informing the examiner of hemostasis. Feeding through the tube may be done. We have used the thrombin routine in patients with the Roundtree bag in place, having them swallow the solution around the tube and allowing it to seep about the balloon.

The active treatment of hemorrhage from esophageal varices is desirable in view of the rather hopeless mortality statistics associated with palliative treatment. For instance, in one series of 115 patients with esophageal varices,[18] 70 were admitted to the hospital because of hematemesis. Of these 70 patients, 59 (or 84 per cent) died during that admission.

An exploratory operation as a means of discovering the source of hemorrhage appears to be a last resort.

Gastroscopy should be done on those patients whose barium meal x-ray studies are normal and who present no evidence of esophageal varices.

SOURCES OF HEMATEMESIS AND MELENA

The preponderant cause of hematemesis and melena is peptic ulcer. According to Bockus[19] it accounts for 70 per cent of all hematemesis and melena. Other causes are given as follows:

Table II

Peptic Ulcer (stomach and duodenum)	70%
Gastric malignancy	5%
Gastritis and duodenitis	5%
Hiatus hernia, benign tumors, sclerotic vessels, post-operative conditions and other intragastric causes	10%
Cirrhosis (80% of bleeding in cirrhosis is due to varices)	5%
All other extragastric causes	5%

Eusterman[20] estimates that peptic ulcer accounts for 85 per cent of gross gastrointestinal hemorrhage. Rivers and Wilbur[21] found ulcer as the cause in 76.8 per cent of 513 cases of hematemesis.

THE TREATMENT OF HEMORRHAGE FROM PEPTIC LUCER

Table III

Shock:

1. C. B. C., hematocrit, N. P. N., chlorides, cross match.
2. Start plasma I. V. until out of shock.
3. Transfusion until out of shock.
4. Record pulse, B. P. every 30 minutes until out of shock, then every hour.
5. C. B. C. and hematocrit when out of shock and daily with N. P. N.
6. Transfuse at rate of not more than 1500 cc./24 hours until R. B. C. 3,500,000; Hgb. 10 Gm.

Other Measures:

1. X-ray as soon as out of shock, and sometimes this may be done sooner if operation is to be done as an emergency.
2. Nothing by mouth for 24 hours, if vomiting.
3. If vomiting continues lavage stomach, unless esophageal varices suspected.
4. Sippy or modified Sippy regimen.
5. I. V. fluids to maintain 1500 cc. output.
6. Atropine and alkalies.

The treatment of gastrointestinal hemorrhage is, then, largely (70 per cent or more) the treatment of hemorrhage from peptic ulcer. There are several modes of approach to this problem. There is the completely conservative approach of never operating until the patient has recovered. The opposite approach is early operation on nearly all such subjects; this method is believed by some surgeons to be best. Still others advocate a middle-of-the-road approach.

For patients who have recovered from two or more serious ulcer hemorrhages, particularly for those over 45 years of age, most gastroenterologists, whether internists or surgeons, advocate surgery, usually subtotal gastric resection, as a means of prevention of ulcer and its hemorrhage. But the use of surgery as a life saving measure in the active treatment of hemorrhage from peptic ulcer is resorted to by few surgeons. There are some well known surgeons, Wangensteen,[22] Allen,[23] Stewart,[12] Dunphy[13] and Armendola,[26] in this country, and Gordon-Taylor[24] and Finster-

er[25] abroad, who believe that many lives may be saved by early surgery.

There are more, perhaps, who disagree: surgeons[14] and internists[19, 27] who insist that the mortality from surgery does not warrant surgical intervention. It is true that this mortality of the surgically treated cases is higher than the general mortality of the medically managed cases but, in fairness, it must be said that those patients operated on are the most seriously ill ones, the patients which in some incidents are turned over to the surgeon as a last resort, many without adequate blood replacement, many who have been in borderline shock and dehydrated for several days. One must consider at this point the definition of massive hemorrhage. The statistics of conservatively managed cases usually include the mild hemorrhages as well as the severe, and there is no generally accepted set of definitive criteria for massive hemorrhage.

Regardless of the enthusiasm of the noninterventionist for his type of treatment it is a fact that from 5 to 10 per cent of patients with massive hemorrhage from ulcer treated medically in this country die.[3] Heuer,[28] of the New York Hospital, states that "approximately 15 per cent of patients who enter the hospital with massive hemorrhage die unless they can be saved by prompt surgery."

To determine which cases will not stop bleeding on conservative treatment requires watchful waiting which may mean that the optimal moment for early surgery has passed. Finsterer advocates operation in the first "golden" forty-eight hours.

Stewart[12] has advocated immediate operation on those patients who have bled grossly, have a red cell count of 2.5 million or less, or circulating red blood cell volume of 60 per cent or less, and have evidence of ulcer, but he does not x-ray first. He has operated on 33 such patients after massive transfusions, performing subtotal gastrectomy, with 5 deaths (15 per cent mortality). Twenty-one similarly severely ill patients refused surgery and six of them died (28 per cent mortality).

Armendola[26] reported one death in 11 cases operated on during the first forty-eight hours (9 per cent) and 15 per cent mortality in 85 cases managed medically.

Reports indicate that an even higher mortality rate from surgery occurs when more than forty-eight hours have elapsed.[19]

We have held that some middleground approach probably is more correct than either extreme. It must be obvious that a certain number of patients hemorrhaging from peptic ulcer will die unless operated upon, but there are still some who argue that these patients are going to die anyway and the conservative approach is the best answer at this time.

We do not accept this decree. It appears from studying the records of deaths associated with hemorrhage that patients die from one of two causes: 1. From complications incident to blood loss, fluid imbalance and inanition, and failure to correct these faults[15] and (2) from exsanguinating hemorrhage *per se*.

The treatment of hemorrhage already outlined pertaining to adequate transfusions, parenteral fluids, feedings and late surgery if bleeding persists should eliminate most deaths in the first group.

In a series reported by Cates,[15] 41 deaths occurred as follows: 9 by end of 1st day, 17 by end of 3rd day, or 24 died after the 3rd day, and 13 died after the 6th day.

The correction of exsanguinating hemorrhage cannot always be accomplished. Some patients, after bleeding slightly, may exsanguinate themselves. For this reason many have strongly advocated operating on anyone who, having apparently stopped hemorrhaging, starts bleeding again, particularly in those cases in which the individual is 45 years of age. Rarely will any ulcer patient bleed so rapidly from the very start that no life saving measure is possible. There are some patients, however, who bleed rapidly and continue to bleed rapidly until death or surgical hemostasis. It is those in this group whom we attempt to salvage by prompt surgery. The actual amount of blood loss does not appear to be the most important feature since this loss may have occurred slowly.

Our approach is the determination of the rapidity of hemorrhage. This method was first advocated by Dunphy and Hoer.[13] We advocate that a hemorrhage which is not controlled by transfusions at the rate of 500 cc. blood every eight hours is one which should be surgically attacked. A patient in shock may require one to three litres of blood for correction of shock. We give as much blood as possible as fast as possible for this. After correction of shock, if hemorrhage continues at a rate greater than can be controlled by the transfusion of 500 cc. every eight hours, the patient should be operated on immediately with the forceful transfusion of whatever amount of blood is necessary to combat shock. By control we mean general condition as well as complete laboratory evidence of blood loss.

At the present time we do not maintain that this approach is the only approach but it seems reasonable and, from our results, appears to be satisfactory.

During the period from April 1946 to June 1950, we have had 148 admissions for gross gastrointestinal hemorrhage in 125 patients.[29] In 112, or 75 per cent of these, the hemorrhage was due to peptic ulcer. In 79 admission cases the hemorrhage was classified as massive, and these patients received an average of 3000 cc. of blood by transfusion. We have taken hemoglobin of less than 10 Gm. and red blood count of less than 3.3 million with proof that the patients had lost blood from the gastrointestinal tract in gross quantity, as a definition of massive hemorrhage.

Seven patients were operated on while bleeding; of this number, one died. There were three deaths in ulcer patients, but one of those we do not consider actually due primarily to hemorrhage. One patient, age 51, died on the seventh day after a sudden copious hemorrhage. He had previously received eight 500 cc. transfusions and was not sufficiently controlled. The third patient was operated on after twelve 500 cc. transfusions in 36 hours, and died during the operation. In retrospect, he should have been operated on earlier.

SUMMARY

The management of gastrointestinal hemorrhage resolves itself into cautiously following the patient until a definitive diagnosis is made, by which time the patient usually will have recovered from his hemorrhage.

The patients who die as a result of hemorrhage are those who die from very rapid exsanguination or those in whom some complication incident to the hemorrhage develops. For the group who bleed slowly it appears that adequate transfusion is necessary. In those who continue to bleed even a small amount, operation is indicated after five to seven days of conservative treatment, the patient receiving adequate transfusions during this time. For those who bleed rapidly early operation is indicated as a method of saving life. A method of estimating rapidity of hemorrhage is presented.

Three features are stressed:

1. Adequate use of blood transfusions.
2. Early x-ray diagnosis.
3. Early operation for those patients not controlled on 500 cc. of blood every eight hours.

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DIABETIC ACIDOSIS

The development of diabetic acidosis or an increase in the severity of the diabetes in a patient who has not disregarded dietary restrictions, who has continued to take insulin faithfully and correctly, and who has not developed a complicating infection, should always suggest the possibility of the undetected existence of a coronary thrombosis.

Acidosis under these circumstances may be of particular importance in the small group of diabetic patients who have coronary thrombosis either without pain, or with atypical symptoms and for whom an electrocardiograph is not always readily available.—Albert Weinstein, M. D., in Am. Practitioner and Dig. of Treatment.

RESISTANT CLUB FEET*

By ALLEN F. VOSHELL, M. D.,
Baltimore, Md.

It is neither my purpose nor desire to bore you with a long review of the treatment of the deformity known as "club foot", nor do I have any dramatically new procedure to offer you that will solve all the problems, but I might be able to add some points and ideas to your armamentarium. At least I should like to re-emphasize the fact that club foot deformity is still a difficult condition and one that merits serious consideration and tedious detailed effort if even a reasonable measure of success is to be attained. The many and varied procedures that have been presented, tried and found wanting, bear out the fact that the solution to club feet has not been attained in full measure, even by the reputed experts. Nor has the cause of this deformity been determined, though many theories have been projected, even, most recently, that the mother's deficiency of riboflavin in diet could be responsible. So far, no theory as to cause, and no single method of treatment has been universally accepted as being always and completely successful in everyone's hands. I am sure that you will agree that these are not idle words.

Much has been said and written about club feet, but in general the methods now used are ramifications of principles many years old. So, each continues to apply to these patients the system which has been the most satisfactory in his hands, trusting to correct the deformity as much as possible from a visual standpoint, at the same time retaining as much function as possible. Unfortunately, neither is attained in a certain percentage of cases and recurrence is all too frequently the case. The derivation of the title of our specialty, "to straighten crooked children," is belied by our failure to correct all club foot deformities, visible and functional. A club foot is something that all can see and, hence, causes psychologic disturbances in parent and patient and may prevent the latter from leading a normally progressive and productive life. I solicit your attention, therefore, and hope that I may prevail upon you to persevere more diligently than ever in your treatment system, but always to be alert to new ideas and methods of your own or other's devisement in order to lower or eliminate treatment results that may be classed as poor.

Although a certain number of club feet may have a postural or positional cause in utero, it is generally believed that some embryologic defect or variation is the primary cause with postural or contractional effects secondary. This concept is borne out by the presence of atrophy and deformity of the calf, failure of the foot to grow, absence frequently of peroneal muscle function, and deformity of the bones, especially the astragalus and scaphoid. Whether all these changes originate when the limb buds appear or later, has not been determined; further studies and investigations may perhaps settle this feature some day. Our present contact with the deformity occurs after birth and our need is a means of correcting the deformity and retaining this correction with improvement in function.

Will Rogers stated that an Indian never gets lost, but a white man frequently does. He gave as the reason that the Indian, when he travels, always looks back at his trail markers and views them from all sides so that he will recognize them on his return, whereas the white man generally looks ahead without fully studying and evaluating what he has just passed. Though this may not be strictly parallel to the problem at hand, with a little thought twisting the Indian can be a good example for us to follow; that is, periodically study and analyze the methods you are using and evaluate your results, keeping in mind that old or discarded methods may have merit if properly used, or perhaps if combined with some other, either of which may have not been fully effective on its own. Give all new ideas and suggestions full consideration, but do not for a moment think that any miracle will be substituted for meticulous and painstaking methods. This age of gadgets and hardware has not changed the anatomy and physiology of human beings, though in some instances improved results have resulted.

Like the Indian, our group in Baltimore has been looking back and gradually studying the results obtained in several of the orthopedic problem groups and have as a result revised our treatment methods in part, or in toto, when we have not been satisfied. Resistant club feet repeatedly have been under the hammer with the results anything but encouraging.

A study was made of about 150 cases of all kinds of club feet from ages of two days to twelve years when treatment was started, 43 per cent being one month or less and 66 per cent being under six months of age. Since 1930 no case has been older than six years and a large majority have been two years or younger, most now being

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in the first few months of extrauterine life. During earlier years children received primary forceful manipulations, achilles tendon lengthening, posterior capsulotomy and plantar fasciotomy followed by casts. Later many had recurrences and were treated by further soft tissue operations or frequently bone operations; many had arthrodeses between the ages of three and six. In 1934 the decancellation procedure was suggested by Curtis and Muro, and this was tried, attacking the cuboid, talus and calcaneus sometimes with transplantation laterally of the anterior tibial tendon. Derotation of the tibia was carried out rather frequently, but was discontinued in 1944 as long leg casts seemed to be effective. In the early twenties soft tissue surgery was done in 100 per cent of the cases and bone operations in 47 per cent, both being repeated frequently. Since 1944 only 44 per cent have had soft tissue operations and 11 per cent an additional bone resection. During the past ten years the majority of the cases have been hospitalized for long periods during which the Kite wedging cast method has been followed for periods from six months to two years, with the use of the Denis-Browne splint afterwards and then special shoes for two to three years. The Denis-Browne splint has been used primarily, also, and for long periods, but was not as successful as the Kite method, so has been used recently only as an adjunct. The system now followed in general is to admit the patient as soon after birth as possible, institute the wedge-cast method until overcorrected, then the Denis-Browne splint until child is ready to walk, when it is used at night only; next, corrective shoes, preferably straight last type oxfords with outer wedges rather than the out-flare, or club foot, last until about the fourth or fifth year. Forty-eight feet were again recently examined and reviewed after varying periods (six months to nineteen years) since the cessation of all treatment and it was found that 17 feet showed good results, 16 fair and 15 poor. Considered as good results were those that had no remaining limitation of ankle motion, no supination of the heel, no forefoot varus, no rocker sole, no peroneal weakness and no asymmetry of the feet. A good functional foot which had residual shortening, moderate forefoot varus, some peroneal weakness and mild atrophy of the calf and foot was considered fair. The poor results showed residual tightness of the achilles tendon, limited ankle and subtalar motions, heel supination and possibly rocker soles and tibial torsion with also more atrophy of the calf and foot.

Only 5 patients were operated upon in the Good Group, the operations consisting of achilles tenotomy, posterior capsulotomy and plantar fasciotomy, but none had bony procedures. In the Fair Group, 9 had operations, 3 of these being soft tissue only, 4 having decancellations and 2 tibial rotary osteotomies in addition to the cast system. The cast treatment was interrupted in these cases for various reasons, which may have accounted for the increased resistance to correction, as the anatomic variations were not much different from those in the good cases. The remaining cases classed in the Poor Group consisted of those having had early operative procedures, prolonged interruption in consistency of cast treatment, bone operations, or anatomic developmental variations; the latter of these is probably the real cause for the failure to remain corrected. So far, then, the best results have been obtained by prolonged manipulations by casts, et cetera, a la Kite, starting shortly after birth and continuing uninterruptedly until overcorrection of heel and forefoot has resulted, avoiding operations and severe trauma. Ideally, the same orthopedist should carry out the treatment of a case from beginning to end as apparently consistency and persistency obtain better results than is true otherwise. However, at best, regardless of the length of manipulative treatment or the age at which it is started, bad results will occur and it is to this group of cases that I wish to draw your attention and to offer some suggestions for your consideration.

As has been said above, there will always be a certain small percentage of the cases of club feet which will resist correction in spite of the most conscientious conservative treatment by the most expert. On the other hand, many surgical procedures have been suggested and tried with equally bad functional results, even though improving the foot anatomically. The destructive character of most of the operations probably has led Kite to institute a vigorous campaign against all surgical procedures, but even though he has stimulated the elimination of many poorly conceived operations, he has perhaps caused many to abandon some valuable surgical adjuncts. The triple arthrodesis will serve as a corrective measure as a last resort, but it probably is best when the tarsal bones have developed to the age of eight or nine, when stabilization may generally be considered as a final procedure. Can nothing be done in the meantime to control the deformity? Or better, can we not hope to avoid late destructive procedures by obtaining bone and joint corrections and retaining same by a balancing of the active controlling factors?

It has been the belief of many that the so-called resistant or recurring club foot, in most instances, will show a lack of peroneal muscle power, either entirely or in insufficient quantity to balance the power of the tibial muscles. Whether this imbalance is a primary factor in the production of club foot is dubious, but it surely plays a large part in the retention of the deformity and in its recurrence because if, during the correction of all three components of the club foot the peroneal function is progressive and good, then the club foot usually will remain corrected; whereas, if peroneal function fails to return in balance with the tibials, recurrence is almost certain to occur. In fact, I think that the status of the peroneal muscles is of real prognostic value early in the treatment course. I do not discount the fact that many cases showing peroneal-power absence also have skeletal abnormalities and early noticeable atrophy of the leg and foot so, may I repeat, I do not think the peroneal-tibial imbalance is the one and only factor in the problem but do consider it an important item. To expect the peroneals to hold balance against the strong tibial combination implies a correction of the articular abnormalities and a control of the strength and leverage effects of the tibials. In many instances both these factors can be accomplished by the wedge-cast system, but in some the ligaments and tendon sheaths are so thick and strong that full or permanent correction is not obtained. Hence, a more radical type of procedure seems justified in order that both features may be accomplished. What may we offer in this regard? For some time we of the Kernan Hospital (Baltimore) staff have been using the transplant of the anterior tibial tendon to the outer side of the foot, but more recently have been doing also a complete medial release in conjunction with the transplant. The combination has not been done arbitrarily in every case; sometimes only one element has been used depending upon the proportionate activity of the peroneals, though many times this is difficult to determine accurately.

Transplantation of the anterior tibial tendon is not a new procedure as you well know, nor is the medial release, but the former has been somewhat discarded of late and the medial release has not until recently been complete enough to fully mobilize the foot.

Many times have I done both, but now I would say that the failures encountered were not due to the procedures, but rather to the poor selection of cases, the incompleteness of the release, or the lateness of the doing.

Our recent interest in transplantation of the anterior tibial tendon was stimulated by the report of Garceau and Manning. They stressed the status of the peroneal muscles and felt that the absence of function in them is a specific criterion for the procedure as it has the particular merit of not interfering specifically with the growing bone structures and that it is applicable to cases which are too young for arthrodesis, et cetera. Garceau reported very satisfactory improvement in 83 per cent of a series of 110 cases; the remaining 17 per cent, though not considered satisfactory, showed some improvement in each case and in none was the procedure detrimental. It is interesting to note that he performed the operation in only 6 per cent of the total number, which also represented the recurrence rate in his series.

We re-adopted the transplantation method in 1948 and, although only nineteen months have elapsed, the apparent results have been considerably better than those by any other method previously used, especially since only the worst cases, those resisting every other form of therapy, were selected. Some had spent a large part of their lives in and out of the hospital, markedly incapacitated, and they have now quite rapidly returned to unrestricted normal activity. Time alone will tell the final outcome.

After using the transplant procedure, there remained a small number of cases which failed to correct and which were too young for a destructive procedure. Indirectly we were apprised of a type of medial release being successfully used by Dr. John McCauley of New York; this release contained a more extensive severance of all the thickened and contracted soft tissues of the tarsal and posterior midtarsal regions, that is, all ligaments (subtalar, talonavicular and naviculo-cuneiform), sheaths of the posterior tibial tendon and, if necessary, the anterior tibial and toe flexors, plantar fascia, capsule and sometimes the tendoachilles; if the posterior tibial tendon is tense and prevents correction, it also is cut and allowed to retract. When reviewed as just listed, the combination seems quite radical, but if you consider the complicated deformity and the discouragement to the surgeon and the patient after continued recurrences, and the disability therefrom, anything is worthwhile, provided it offers a reasonable chance of decreasing the deformity, increasing the function, and shortening the period of treatment.

A brief review of the system we have followed for the past few years might be pertinent at this point:

1. Begin treatment as early as possible, preferably in the hospital.
2. Wedge casts until as much correction as possible is attained.
3. Careful check of the situation to determine the status of the peroneals and whether the posterior foot is in valgus; if foot is in valgus but peroneals show no action, consider tibial transplant as next procedure; if foot is not in valgus, but peroneals are sufficiently active to balance the tibials, consider medial release alone; if neither of the above situations exists, consider the combined procedure, or continue wedge casts and review again later. Actually we have not done both procedures at the same sitting.
4. Medial release of all contracted soft tissues as described above, being sure that all released joint spaces are well opened.
5. Postoperative cast immobilization in fully corrected position for one month.
6. Re-evaluate the peroneal muscles following cast removal, since function sometimes returns due to relaxation.
7. If the peroneals are still inactive, transplantation of the anterior tibial tendon into the dorsal aspect of the cuboid is done.
8. Postoperative cast immobilization for one month.
9. Ambulation and physical therapy to train the changed muscle actions and develop control, with use of cast or brace to hold foot in valgus until the articulating bone surfaces become reshaped.
10. Straight last oxford shoes; outer border lifts if necessary. Regular supervision-checks should be made to prevent tendency to recurrence.

I realize that I am perhaps a bit previous in presenting this report in such an apparently confident manner and so I offer it as a preliminary one, since the number of cases treated in which this system was used has been small and the time element short, but so far the results look quite promising.

Thirteen patients with twenty-two feet have been operated upon according to the described formula. All had been very resistant cases, had been hospitalized three or more times for repeated wedge casts, and most of them had undergone previous surgery of one type or another, some several times. At the time of operation the youngest patient was three and the oldest eight, the average age being four and three-quarter years. The average interval since surgery has been thirteen and one-half months, if three cases now under active treatment are excluded. The average stay in the hospital, prior to this procedure, was four hundred and twenty-seven days.

In attempting to evaluate the results to date, the following criteria have been adopted:

(a) Very good: a painless, well balanced foot with good joint flexibility, able to run and play normally and to wear normal oxford shoes; may or may not show persistence of some components of club foot to a minimal degree.

(b) Satisfactory: general improvement in balance and the ability to run and play, and in the overall appearance of the foot; may or may not require wedges or corrective shoes; all components of club foot moderately corrected.

(c) Unsatisfactory: the foot is either overcorrected to a point where further surgery is required (although this may still be better than the preoperative situation), or is not corrected at all.

The same comment can be made by us that Garceau made: no case has so far been made worse by these procedures.

The following table shows the results so far, eliminating the three recent cases with their six feet.

	No. of feet	*Percentage*	
Very good	3	18.75	81.25
Satisfactory	10	62.50	
Unsatisfactory	3	18.75	
	16	100	

The three very good results were obtained in the three youngest patients who happened to be three years of age at the time of operation. It would, therefore, appear that the procedure will produce the best results when performed at the earliest age possible, or as soon as you have concluded that correction by wedge casts will not be possible, that is, before much bone deformity has occurred and while sufficient growth is possible in the foot.

Analysis of the three unsatisfactory results is of interest. Two of the feet, in the same patient, had transplants performed before the soft tissue factors had been corrected, in the hope that the transplants would correct the deformity, but this apparently was an erroneous conception. Although there is some evidence that transplants do exert a corrective influence, the transplant should be utilized only to maintain correction and thus prevent recurrence. In the above patient the feet were not helped at all, but are no worse than before operation. This patient was not treated in accordance with the outlined program and the case could have been excluded from the series, but it demonstrated the futility of not following the basic principles and sequence of procedures.

The third unsatisfactory foot was so classified because of overcorrection. Following transplantation, this foot was maintained in an overcorrected position for ten weeks because of an incidental fracture through the distal end of the tibia. Upon removal of the cast, it was noted that the foot was in valgus but in spite of this its function was considerably improved. The foot was watched carefully for a year during which time it was noted that the peroneals, which apparently had been dormant for six years, were becoming more and more active with resultant gradually increasing flat-foot deformity. A subsequent exploration showed that the transplanted

tibial tendon was adherent along its entire course, thereby acting as a "check-rein" and holding the foot in valgus, probably the result of too prolonged immobilization. The tendon was transferred back to the medial side of the foot, but sufficient time has not elapsed to permit proper evaluation. The other foot in the same patient has been quite satisfactory.

It is interesting to note that after the transplant procedure alone, a surprising increase in the flexibility of the majority of the tarsal joints occurs and in almost every case, some function of the peroneal muscles becomes evident, even after years of apparently complete inactivity, similar to some cases of poliomyelitis; in one case the peroneal power has steadily increased and a return transplant may become necessary. The transplant operation should not be used when peroneal function is good to normal. Untreated cases several years old probably will respond in the same fashion as the infants, though immobilization following the operations will need to be continued for a much longer time.

Although no scientific significance can be attached to the opinions of laymen (parents in this instance), it is gratifying to note that the parents of these patients have been almost unanimous in the feeling that their children have been very much helped by the procedures, more so than by any other form of therapy previously utilized, and they have been happy with the results. Also, a most important item is that the child no longer wears out his expensive shoes so readily and thus there is less strain upon the family pocketbook.

Finally, of the thirteen satisfactory feet, none has required any special therapy since discharge from the hospital.

SUMMARY OF THREE CASES

Case 1.—J. M., Age 4, W., M.

1st admission: Nov. '45 to Jan. '46. Age 5 months (had been treated as an outpatient with casts for three months). Examination revealed right club foot. Treatment, casts.

2nd admission: June, '47 to August '47; age 2 years; revealed recurrence. Treated with casts. Good correction obtained. Appropriate shoes provided.

3rd admission: August '48 to Oct. '48. Age 3 years. Recurrence. No peroneal function. Casts for three weeks. Oct. 5, '48, anterior tibial tendon transplant.

O. P. D. check-up on 1/28/50: Mother: "feet are perfect."

Rt. foot: Transplant 4 plus
Dorsiflexion—active minus 10, passive plus 5
Heel and forefoot neutral
Good balance, limber joints, calf filling out
Shoes normal
Peroneals doubtful
(Very good)

Case 2.—R. H., W., F.

1st admission: Oct. '42 to May '43; age 2 years (treated by general surgeon from age 7 days to present). Bilateral club foot. Treatment: decancellation, right foot; multiple tenotomies and manipulation of left foot. Out in walking casts.

2nd admission: Apr.-Oct., 1946. Age 6. Recurrences, bilateral. Treatment: wedged casts. Good correction. Appropriate shoes.

3rd admission: June-Dec., 1948. Age 8. Recurrences. Treatment: wedged casts 3 months. Then on 9/29/48, bilateral anterior tibial transplants, casts 6 weeks, outer sole/heel wedges.

1/28/50—Mother: "Feet much better." No complaints. Good function. Rt. normal. Lt. much better.

P.E.—Right foot:
Peroneals 1 plus
Transplant 4 plus
Relaxed joints
Dorsiflexes active—minus 15°
Passive—90°
Heel has trace of valgus
Normal shoe
(Borderline between very good and improved)

Left foot:
Peroneals 1 plus
Transplant 3 plus
Heel has trace of varus
Moderate metatarsus adductus
Some rigidity of tarsal joints
Uses outer sole and heel wedges
(Improved)

Case 3.—M. L. K., W., F.

1st admission: Nov. 9, 1945 to Jan. 27, 1946. Age 5 weeks; had been treated elsewhere for 3 weeks with casts. Bilateral club feet. Treated with casts for two months and then club foot shoes.

2nd admission: Mar. 6, 1946 to May 28, 1946. Age 5 months; beginning to recur in previous few weeks. Treated by consistent casts and wedging until feet fully corrected; to wear club foot shoes and plaster splints at night.

3rd admission: Aug. 20, 1946 to Oct. 11, 1946. Age 10 months; left foot tending to recur, es-

pecially in heel; right foot satisfactory, though slightly tight. Operation on left foot, achilles tendon lengthening, posterior ankle capsulotomy and plantar fasciotomy; Kite casts on both feet and later wedged. Discharged with club foot shoes with feet in good positions.

4th admission: April 12, 1950 to still in hospital. Age 4½ years; right foot corrected, left foot resistant and recurring in spite of twice daily stretching and massage by mother. Operations: left medial release (complete) and achilles tendon lengthening with cast for 9 weeks, then shoes as peroneals show returning function. May need tibial transplant later, though possibly not, if peroneals continue to improve.

CONCLUSIONS

1. A brief review of past experiences and various methods of treatment of club foot has been given.

2. The wedge-cast method is considered to be the most satisfactory for feet with only soft tissue contractures, minor atrophy and good peroneal action. These feet correct easily and tend to remain corrected.

3. Transplantation of the anterior tibial tendon to the outer side of the foot and medial release are suggested as a useful combination in resistant or recurrent cases, under certain circumstances.

4. The importance of the peroneal muscles is stressed; their status is of prognostic importance, and their strength determines retention of correction.

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Note: The assistance of Drs. Robert Abrams (Baltimore) and S. R. Terhune (Birmingham) is deeply appreciated and herewith acknowledged.

WHILE ROME BURNS

Most physicians who watch the fires that are bursting into flame in the world today must wonder why more time and thought are not devoted to analysis of global problems by eminent social and medical scientists. Such participation is conspicuous in operational attacks, but conspicuously absent in the preventive approach. And yet if more anthropologists, historians, economists, geographers, epidemiologists and biostatisticians came out of their classrooms long enough, they might contribute to a rational solution of mankind's most pressing problems before the greatest world war actually bursts out.—New England Journal of Medicine.

PRESENT PROBLEMS AND CONCERNS IN THE PRACTICE OF ANESTHESIOLOGY*

By A. WILLIAM FRIEND, M. D.,
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It appears to be generally agreed that the many advances that have been achieved in the art and technique of anesthesia in recent years have contributed in no small measure to the numerous advances in the technical knowledge of surgery and its allied sciences.

Dr. James R. Bloss,[1] one of your many distinguished and highly esteemed members of the West Virginia State Medical Association, said in his presidential address at the 60th Annual Meeting of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, a few months ago: "Of all specialties obstetrics is the most important. In none other is the responsibility of life equal to ours, since with each of our patients at least two (in Dafoe's experience six) are dependent upon the scientific knowledge and technical skill of the attendant. The obstetrician must be an internist, a surgeon, a pediatrician, a psychosomaticist, as well as an economist, a eugenist and a sociologist. In spite of all this, its importance appears to be the least appreciated of any the specialties by recent graduates in medicine. This particular branch seemingly is not appreciated in the curriculum of most schools of medicine. In but a rare few is time for proper teaching allocated to it." To paraphrase the advertising of a well known cigarette manufacturer I thought that, except for anesthesiology, no other specialty could make that claim.

There in a nutshell are most of the present problems and concerns of the practice of anesthesiology. There in a nutshell is a challenge especially to you in West Virginia, a challenge which comes not frequently. You in West Virginia at this very moment are in the process of deciding whether or not you will construct and maintain a four year school of medicine and dentistry. What an opportunity that presents! Some of you here at this meeting unquestionably will be consulted about the many problems which are bound to arise, especially as they concern the teaching and practice of anesthesiology. If the ultimate decision of the citizens of West Virginia should be in favor of the establishment of a four year school of medicine and dentistry, let us fervently hope that ten years from now, as a result of your efforts and as a memorial to your efforts, it will be necessary to revise Doctor Bloss's words which have just been quoted both as they apply to obstetrics and to anesthesiology.

*Presented before the West Virginia Society of Anesthesiologists at the 83rd Annual Meeting of the West Virginia State Medical Association at White Sulphur Springs, July 28, 1950.

It is a certainty that no one would be happier than Doctor Bloss if such a revision could be justified.

Anesthesiology at the present moment is at a crossroads. At a crossroads the signs usually point in four directions but we know that for medicine in general and for anesthesiology in particular they point in only two directions, viz:

1. Will the progress and practice of anesthesiology be directed and dictated by those whose ultimate aim is the socialization of medicine, or
2. Will the practice of anesthesiology be left free and unhampered to progress as medicine has always progressed on a private practice, private enterprise, fee for service basis?

Lundy has said: "We stand on a knife edge in time. Everything to one side is past, everything to the other side is to come."[2] We know what is past. It is difficult to forsee the future. Let us look at the present.

Many of us have insurance of one kind or another to help us in case of sickness. Voluntary prepaid hospital and medical insurance plans should be encouraged. Some of these plans, however, are attempting to include as hospital services certain professional services as pathology, radiology and anesthesiology. Such plans should be condemned. They should be condemned because they confuse the issue, they confuse the patient, and they are inimical to the public welfare. Let us not allow ourselves to be confused and let us not allow our patients to be confused as to what is meant by the terms "hospital services" and "medical or professional services."

The House of Delegates of the American Medical Association has stated, "if hospital service is limited to include only hospital room accommodations such as bed, board, operating room, medicines, surgical dressings and general nursing care, the distinction between hospital service and medical service will be clear."[3] The Committee on Hospitals and the Practice of Medicine of the American Medical Association has stated that the practice of anesthesiology, pathology, physical medicine and roentgenology are an integral part of the practice of medicine in the same category as the practice of surgery, internal medicine or any other designated field of medicine.

Such are the well known policies of the American Medical Association. The policy of the American Hospital Association, of which the well known Blue Cross plans are subsidiaries, is quite different. The Board of Trustees of the American Hospital Association early in March 1950 approved and adopted a resolution stating: "radiologic, pathologic, anesthesiologic and physiatric services are included properly in a patient-day of hospital care"; and "that services rendered by physicians in radiologic, pathologic, anesthesiologic and physiatric departments of hospitals be included in prepayment hospital service plan subscriber certificates."[4] Since the local Blue Cross commissions are part and parcel of the American Hospital Association, they are quite naturally committed to the fulfilment of the policies of the parent organization. Such a fulfilment was proposed in one community in Ohio the month following the adoption of the resolution just referred to and less than two months after the local Blue Cross had enlisted and received the full support of the local County Medical Society in a community-wide drive for new members. The new proposal was to include as an additional hospital benefit anesthesia when administered by a salaried employee of the hospital. Few knew of the proposal beforehand. When word of it got around, the result was terrific. It was like the two birds flying along when a jet plane whizzed by. One bird said, "I wonder what he's in such a hurry about." The other said, "You'd be in a hurry too, if your tail was on fire." The medical profession was immediately on fire. The implications were obvious. Patients no longer would be able to have the physicians of their choice give their anesthetics if they wanted to participate in all the benefits of their Blue Cross contracts. In the Ohio community just referred to many general practitioners and family doctors give anesthetics, and since the hospitals obviously could not hire all the physicians who gave anesthetics it meant that the patients would be forced to accept whatever anesthesia the hospitals wished to provide regardless of its caliber. Many physicians consulted their patients, explained to them what was meant and what the results would be. The patients gave their answer. Their answer was that they wanted to be free to choose their own doctors for anesthesia or at least have their surgeons or family doctors free to make the choice. They did not want to take whatever the hospital cared to offer. The end result was that anesthesia was not included in the new Blue Cross contract as an added hospital service. Medical anesthesia in that community remained on a private practice basis.

But this was not an easy achievement. Far from it. It came only from the concerted and unified efforts of the entire medical profession, from hearty cooperation by all and dignified acquiescence by some. "No government agency dealing with health and welfare or private insurance plan can succeed without our wholehearted support; we have great power to build

or destroy. Rightfully, we have accepted the principle of prepaid medical care and hospital insurance and we must make it succeed. Unnecessarily prolonged hospitalization and diagnostic procedures are not clearly indicated and should be discouraged. In return for our professional support, we expect that hospital insurance plans refrain from transgressing into the practice of medicine. Fortunately, on our local level, we have receievd a high degree of respect from the various insurance groups. This is not the situation in other locations. It may be necessary for the profession in some areas to exert its power of noncooperation and nonparticipation which can result in complete derangement of their actuarial experiences and financial loss resulting in destructive rates."[5]

In other words, if some insurance plans dealing with hospital and medical care appear not to be in the best interests of our patients and ourselves, let us lend our interest and support and encouragement to others which do. The obvious solution, of course, is the one suggested by the Committee on Hospitals and the Practice of Medicine of the American Medical Association. "In order to initiate a method for remedying this situation, it is recommended that the Blue Shield and Blue Cross Commissions be requested to cooperate to the extent of writing all new contracts in such a manner that Blue Shield will cover insurable medical services and Blue Cross will cover insurable hospital services."[3] If Blue Cross would do that many of our troubles would be at an end. One of our biggest problems in this connection, however, has arisen from the fact that we anesthetists have not been alert to see that anesthesia has been recognized in various insurance and other plans as a professional service. We know it is a professional service. We should make everyone else know it is a professional service. We should aim every effort toward seeing that it is so recognized along with surgery and obstetrics and medicine and all the other specialties in all medical indemnity and other insurance plans. Keep hosiptal services separate and distinct from medical services. Anesthesiology is not and should not be a hospital service. The American Medical Association has defined for us what hospital services should be.[3] Let that definition be our guide and at every opportunity let us define it for all our patients, every one of the 150 million of them. But above all let us point out and emphasize to our professional colleagues, both to those in other specialties and to those in general practice, the importance of having anesthesia established beyond any doubt as a professional service, that if anesthesia should be reduced to the status of a hospital service and all anesthetists forced to become hospital employees it will be only a matter of time and another step down until they, too, would be reduced to the same level. Tell them of the report of the recent survey made by the American Society of Anesthesiologists, Inc., which showed that almost 75 per cent of the physicians practicing anesthesia in this country are practicing it on a private practice basis just the same as they are practicing their part of medicine on a private practice basis. Let us lend our every aim to correct whatever false impressions may have developed that anesthesiology is or should be a hospital service. Surgeons and obstetricians and pediatricians and internists have felt too secure. This has not touched them yet. Show them the insert which came in the News Letter of the American Society of Anesthesiologists, Inc., for May 1950, which has in it the "Medical Review" column which appeared in "Hospitals" published by the American Hospital Association, April 1950, in which it is stated: "Radiology, pathology, anesthesiology and psychiatry are services vital to a high quality of patient care and are properly provided to hospital patients in both inpatient and outpatient departments of hospitals as a part of their diagnosis, treatment and care." If anesthesiology is such a vital part of hospital care, are not surgery and all the other specialties equally important and equally involved?

To refer again to the Medical Review section of "Hospitals," April 1950: "Net income accruing to a nonprofit hospital from the operation of any department, including specialized medical service departments, should be applied against the total cost of providing hospital services." That means that the profits to which hospitals have become accustomed from the exploitation of salaried technicians, anesthesiologists and other physicians should be used to help defray the deficits in other departments whether they be service departments like the laundry and kitchen or otherwise. If physicians who are now hired on salary by hospitals pay heed to the report of the American Medical Association Committee on Hospitals and the Practice of Medicine, which denounces unequivocally all systems whereby hospitals hire salaried physicians for medical care and then bill the patients for that care, hospitals are going to be deprived of one source of their income. There, without doubt, lies one of the main hospital-physician problems. It is a real problem and one wishes that there were a ready answer. Of the many answers suggested, the one which seems to be the most logical is given by Tovell and Steven in which they state: "It is our claim that reduction and elimination of deficits is a responsibility of the citizens served in each community

and is not the responsibility of one segment of the medical profession."[6]

Hospital deficits should be met by the community at large, not by one specialized portion of it. Let us not close our eyes, however, to the fact that many hosiptals will persist in trying to defray deficits by the exploitation of physicians who will allow themselves to be exploited. They will offer salaries and other temptations which will look most attractive to a resident just finishing his training. Such residents and other physicians need help. From whence is such help forthcoming? From the American Society of Anesthesiologists, Inc., through its Committee on Medical Schools and Postgraduate Education, of which Dr. Stevens J. Martin is Chairman. As pointed out by Dr. Rolland J. Whitacre, President of the American Society of Anesthesiologists, Inc., in the News Letter, July 1950, this committee is inaugurating a subcommittee called the Placement Subcommittee which has as its aim the establishment of local placement committees in each component state society. These local placement committees will collect and keep on hand pertinent information on the local level to transmit to the national committee when needed. Thus, when a man wishes to establish a new practice or change from one location to another, he will be able to have available all information concerning the possibilities in any given community. The local committees will meet with him and acquaint him immediately with the general overall medical and hospital customs and practices prevailing in that community. He will be saved time and expense and will immediately make professional connections which might otherwise take months or years. The need for these local subcommittees is urgent indeed right now. Let us all do our part in promoting their immediate establishment so that there will be no opportunity for any third party, no matter who or what it is, to interpose itself between us and our patients.

In this discussion reference has been made many times to such terms as medical service, medical indemnity, professional hospital service, salaried employee of the hospital, voluntary prepaid medical indemnity and hospital service plans and so on. To those familiar with the terms, the meanings and implications are obvious. But one wonders how many interns and residents finishing their training are familiar with them. How many have a working knowledge of them? Many of our great colleges and universities offer courses of instruction in political and religious and other beliefs to which all of us do not subscribe, but at least students are free to listen and form their own opinions. Could not medical schools and anesthesia training centers offer similar courses in medical economics? Would it not be better for medical students and residents in the various specialties to know beforehand about voluntary and compulsory health insurance plans than to have to learn about them later by cold and hard realities? Very few students finishing their internships and residencies know anything at all about the problems of opening an office and establishing a practice. Very few of them are familiar, except by hearsay, with the various forms of the practice of medicine which are available to them. Many receive their training in environments where little emphasis is placed on the possibilities available except salaried hospital positions. Should they not know, too, of the possibilities in private practice, in private group practice in all its various forms, practice in the regular armed forces, in the Veterans Administration, and so on? They are instructed no end in the basic and clinical sciences but are they properly instructed in the workaday business details of earning their bread and butter and providing for themselves and families? This remissness should be corrected by offering instruction appropriate to meet the needs.

Such are some of the present problems and concerns of the practice of anesthesiology. Toward their solution we all direct our efforts. They can be solved and will be solved but to do so will require from all of us unity of purpose, action and ideals. As in every endeavor, whether it be in peace or in war the front must be united in thought, in word, and in action; the specialist united with the general practitioner, the general practitioner with the specialist, the physician with the hospital and the hospital with the physician. There must be on the part of all a willingness to help in solving the common problems but with all our willingness let us not temporize for one moment with what we believe to be our justifiable ideals, the ideals of that patient-physician relationship which has made the practice of medicine in this country laudable as it is today.

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THE NEWER INSULINS AND SOME OF THE COMPLICATIONS OF INSULIN ADMINISTRATION*†

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Since the discovery of insulin by Banting and Best[1] in 1921, the treatment of diabetes mellitus, both by diet and insulin, has undergone important modifications. The natural trend of this treatment has veered definitely toward a regime allowing the patient with diabetes to live as normal a life as possible as regards diet aided by the administration of insulin. There are many reasons for this tendency as it is based primarily on physiological standards allowing patients to eat, within reason, a normal type of diet which is more palatable, gastronomically satisfying, and basically economical, containing as it does such foods as bread, potatoes, rice and grits. Of even greater importance is the fact that these individuals may lead a nearly normal life socially and go about with their fellow men without feeling set apart. To those who must spend a lifetime with this disease, the psychological importance of such a regime is obvious. We shall attempt to evaluate the various types of insulin developed around the above concepts and to mention briefly some of the less frequent complications of insulin treatment.

It is generally accepted that approximately 50 per cent of all persons with diabetes can be treated on diet alone, 25 per cent can be easily handled with any type of insulin, and the other 25 per cent of moderately severe or severe cases present the major problem of control. It is with this latter group that we are most concerned. When one reads reports of treatments from various clinics, one marvels at the cooperation and precise regulation of many of the reported cases. In our hospital which is a large general teaching hospital serving a rural area, we deal with many country folk who lack the necessary intelligence to carry out in detail a rigid regime. Therefore, our results in many instances are those which have been obtained with this type of patient where complete cooperation is not always obtainable.

Regular insulin with its quick action, evidence of which is clearly shown by its influence on the blood sugar twenty minutes after its injection, lasting for five or six hours, obviously satisfied the requirements of only a few of these patients unless frequent injections were given. Crystalline insulin to which zinc was added gave no additional prolonged effect and is of value particularly in those cases in which a local allergy to the regular type of insulin is manifested. An ideal type of insulin would, of course, follow the pattern of that which is secreted by the human pancreas, the quantity delivered to the blood and tissues, responding to the need caused by the elevation of the blood sugar and subsiding to a minimum output when this need has passed. Up to this time, such an ideal has not been achieved, and even the most optimistic investigator would not predict its development in the near future. Many attempts have been made to prolong the action of regular or crystalline insulin which in some measure would be comparable to the action of insulin secretion in the normal individual.

Great credit should be given to Hagedorn[2] of Denmark who had tried many combinations of protein with insulin, finally producing protamine zinc insulin by combining the protein protamine obtained from fish sperm with regular insulin. This preparation provided the profession with a so-called "intermediate type" or "depot type" and was so chemically combined that the insulin was released slowly from its combination with protamine and zinc, with a resultant prolonged action. Such an insulin proved to be ideal for the less severe cases of diabetes mellitus and in doses up to 40 units in twenty-four hours has proved quite satisfactory in satisfying the insulin requirements of many patients. For the most part, doses larger than 40 units fail to control glycosuria adequately and, furthermore, frequently lead to insulin shock. In the more severe cases, the effect on the blood sugar level after a meal allowed too high an elevation. The action of protamine zinc insulin can be shown to last for more than twenty-four hours in the fasting individual, and also to have an additive effect with a carry-over from day to day. Globin* is a similar "depot type" of insulin and usually gives its best results in the same type of patient who is best controlled by protamine zinc insulin. It has the advantage of having a more rapid effect than protamine zinc insulin with the lowest blood sugars in the late afternoon. Sometimes this effect may be disadvantageous because of frequent shock during working hours. Furthermore, the action of globin insulin is not as prolonged as that of protamine zinc insulin, its maximum effect often being dissipated in about fifteen hours. On the other hand, the fact that this is an insulin

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†From the Department of Internal Medicine, University of Virginia Department of Medicine, Charlottesville, Virginia.

*Furnished through the courtesy of Dr. Donald S. Searle, Burroughs Wellcome & Co.

solution makes it less likely that the insulin will be "dumped" out at inopportune times.

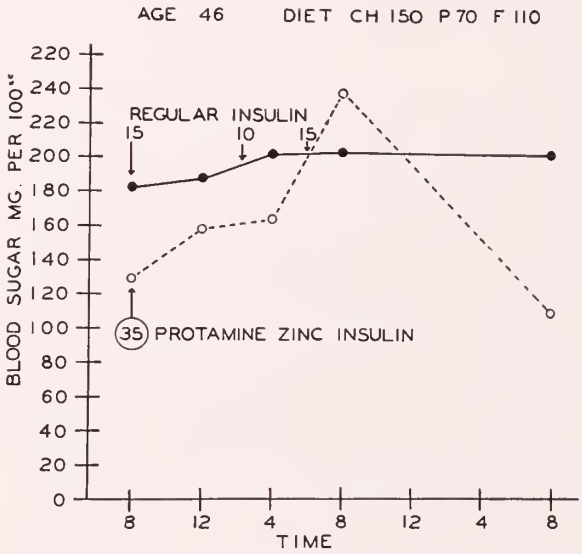

Chart I: Typical example of protamine zinc insulin action. Elevation of blood sugar at 8:00 p. m. above normal not considered important as 24-hr. curve is otherwise excellent.

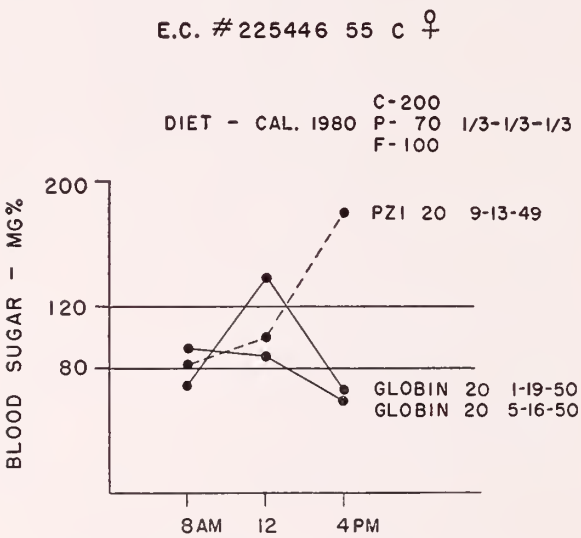

Chart II: Globin insulin curve with low blood sugar at 4:00 p. m. compared with some patient on protamine zinc insulin.

A theoretical combination of insulin hydrochloride with its quick action and protamine zinc insulin with its prolonged action would seem ideal. Protamine zinc insulin as prepared contains an excess of protamine and when the two (regular or crystalline insulin and protamine zinc insulin) are mixed together, a new type of protamine zinc insulin is developed which gives quicker regular-like action and also retains much of the prolonged protamine effect. Mixtures containing two parts of regular to one part of protamine or three parts of regular to one part of protamine are most often used and seem to have approximately similar action. These mixtures may be prepared and self-administered by the intelligent patient. They may be made in a syringe, or the 2:1 mixture has been made up in oversized bottles using U-80 insulin, thus leaving space for 5 cc. of protamine to be injected into the bottle containing 10 cc. of regular insulin. The syringe mixture is less predictable, perhaps because of the fact that it cannot be well mixed and, too, there are technical difficulties which may arise. For instance, the needle always must be placed in the regular insulin bottle first, because if the needle is placed first in the protamine zinc bottle, a small amount of protamine zinc may

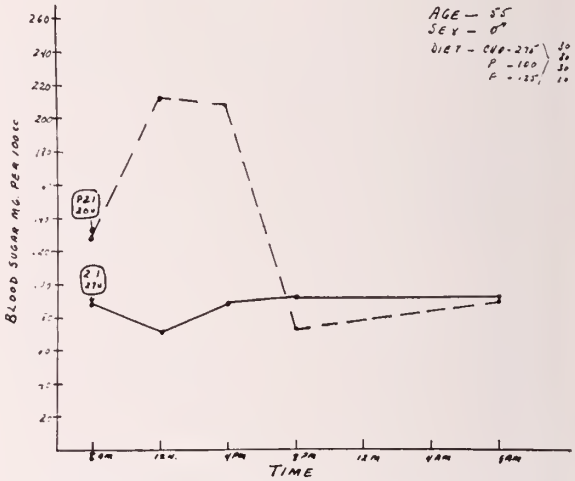

Chart III: Curve of patient on 2:1 mixture compared with some patient on protamine zinc insulin.

be carried into the regular insulin bottle each time and thus contaminate it, eventually making a protamine zinc mixture out of the regular insulin. One can see that considerable intelligence is a prerequisite for carrying out this maneuver. However, this preparation has the advantage in that one can increase or decrease the amount of regular insulin in the mixture, which might be valuable in controlling some patients. The oversized bottle which has been quite satisfactory in so far as stability is concerned carries the risk of introduction of organisms during the mixing process.

For several years Peck[3] has experimented with various protamine combinations with insulin in the effort to obtain a stable product with predictable effect. One of these preparations, NP-50, was relatively unstable but recent clinical experiments have been carried out with the so-called NPH-50.* The latter insulin, containing

*Furnished through the courtesy of Dr. F. B. Peck, Eli Lilly and Co., Indianapolis, Ind.

0.50 mg. of protamine to the 100 cc., is quite stable, is neutral (indicated by N), and contains protamine (indicated by P), the H standing for Hagedorn who was responsible for the development of this mixture, with 50 showing the amount of protamine in each 100 cc. This mixture, quite similar in its action to the 2:1, has proved most efficacious in treating the moderately severe and severe type of patient. In our hands in quite a few patients it has been a satisfactory insulin preparation, having a good carry-over effect and providing for adequate control during the night. In patients of the labile type, response and control have been good for the most part. Shock, when it occurs, is likely to occur in midmorning. In a few patients late afternoon high peaks have been noted but, by and large, patients have tolerated this type of insulin with good results. We have not attempted to place large numbers of patients on NPH-50, but have experimented with some of our well regulated individuals. Marble[4] and Dolger[5] also have noted satisfactory results in using this type of protamine zinc insulin. Marble has stated that exercise enhances the effect of NPH-50, which apparent fact has been noted by us also. NPH-50 has the further advantage that regular insulin may be added to this mixture as indicated in individual patients without changing the character of the mixture, resulting in obtaining the full effect of the added dose of regular insulin.

Diabetes mellitus presents a problem in each individual case, particularly in the severe one, that cannot be attacked *en masse;* therefore, there is no ideal type of "depot" or "intermediate" insulin which is applicable to all cases. In our hands NPH-50 so far is the most satisfactory, and globin has proved to be quite useful in several difficult cases.

BRITTLE OR LABILE DIABETES

This difficult group of patients comprises a serious problem found most often in the young or the thin elderly diabetic, characterized by rapid, unpredictable variations in blood sugar levels, with inordinately high blood sugars rapidly followed by precipitous drops to shock level. Sometimes this effect is temporarily found in pregnant women with diabetes and in those who are under emotional stress and strain. Occasionally the condition might be caused by endocrine imbalance, with abnormalities of the adrenals, pituitary or liver being responsible for its existence. It is important to emphasize that instability of the blood sugars in such patients may be brought about by the addition of small increments of insulin and many may not be taking large doses at the time the lability of the blood sugars is present. Fabrykant[6] and others have called attention to an interesting group showing this phenomenon. They state that as a result of

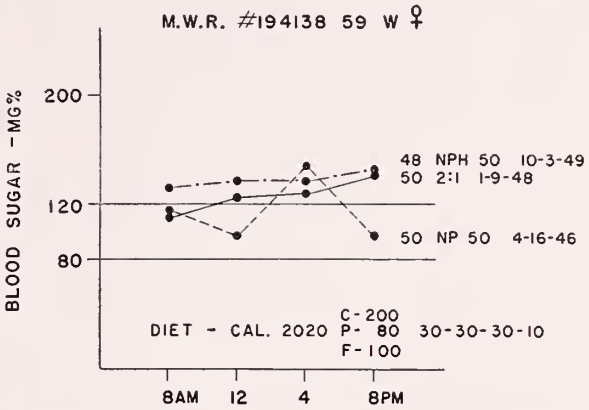

Chart IV: Example of action of NP-50 and NPH-50 in same patient.

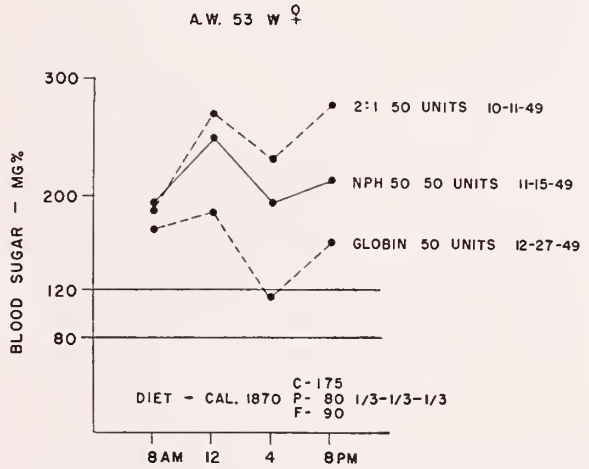

Chart V: Curves showing action of globin insulin, 2:1 mixture and NPH-50 in same patient. Globin curv eis much the best.

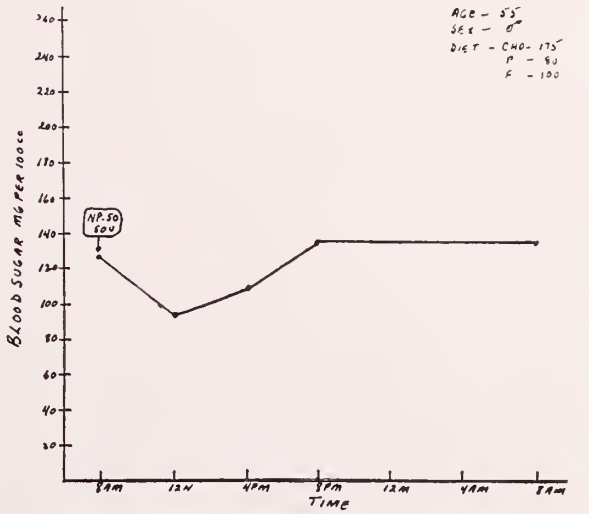

Chart VI: NP-50 indicating smooth 24-hr. curve.

investigation of some of their patients the signs and symptoms of hypoglycemia may be present without low blood sugar levels being present and that many of these individuals show an epileptic pattern of the brain tracings as evidenced by the electroencephalogram. According to these investigators, patients showing this tendency may be helped by the administration of such anticonvulsive drugs as dilantin and mesantoin which decrease the frequency of their seizures, enabling the physician to add more insulin, thus obtaining control which cannot be achieved with shock by the addition of insulin alone. Occasionally in treating such labile patients, intermediate insulin mixtures are helpful. More often they have to take several small doses of insulin

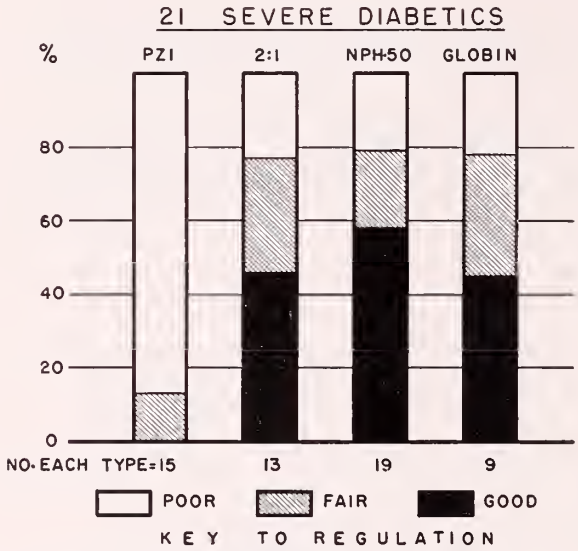

Chart VII: Composite chart giving results in treatment of 21 severe diabetics, 7 of whom were of "brittle" type.

during the twenty-four hours. Colwell[7] has in some instances obtained good results by giving globin insulin, two-thirds of the total dose before breakfast and one-third before supper. Of most importance, however, is cognizance of the fact that these patients do not show large amounts of sugar in the twenty-four hour specimen even though their blood sugars may attain great heights during some period of the twenty-four hours and thus that too rigid control should not be attempted.

INSULIN RESISTANCE

Rarely does this condition occur but when it does a patient suddenly may have his insulin requirements elevated to huge levels. The well known effect of infection in raising the insulin requirement always must be of foremost consideration. Occasionally the insulin is not absorbed because of scar tissue formation from too frequent injections in one area. Various other possible factors have been postulated; these include liver disease, endocrine disturbance and blood dyscrasias. Often, however, no apparent

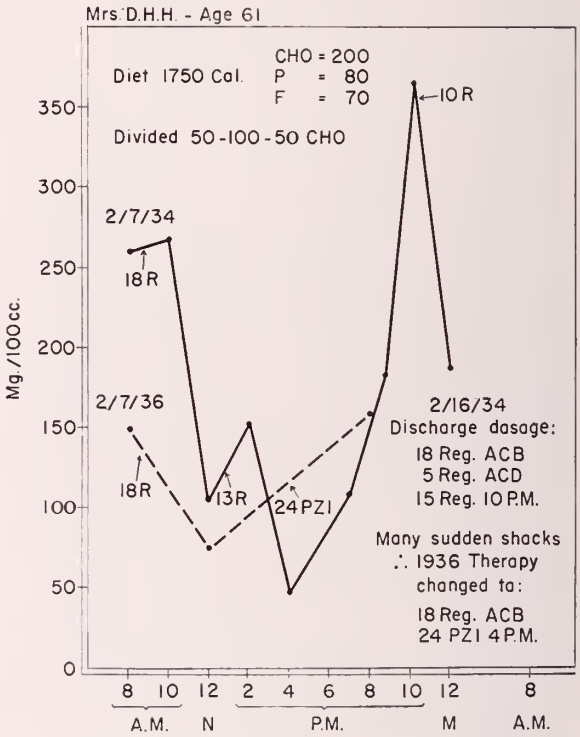

Chart VIII: "Brittle" diabetic with marked variation in blood sugar levels. R equals regular insulin and PZI equals protamine zinc insulin.

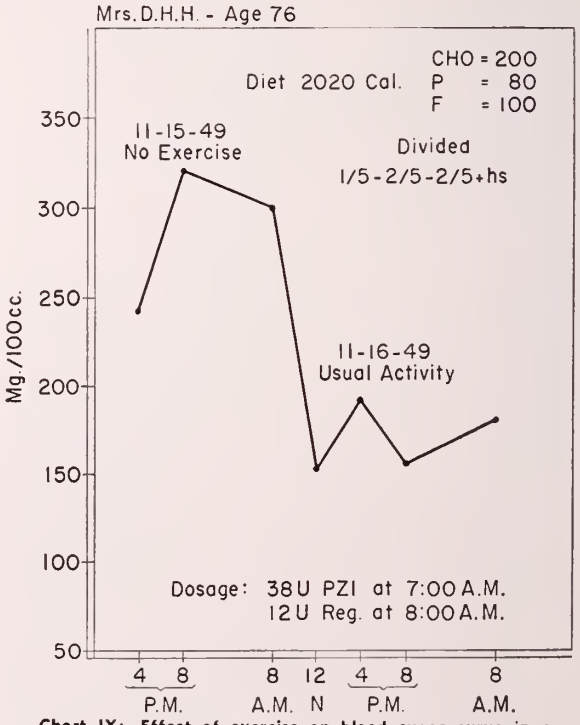

Chart IX: Effect of exercise on blood sugar curve in a "brittle" diabetic.

cause can be found. It is believed, particularly by Lowell[8], that in those cases of unknown etiology insulin (which is a protein) has an antigenic effect, producing antibodies which, when combined with antigen, lead to ineffectiveness of the injected insulin. Fortunately, this condition usually is of temporary duration, and increasing the doses to the amount necessary, no matter how high, to obtain satisfactory results is effective.

INSULIN ATROPHY

One of the rarer complications of the administration of any type of insulin is fat atrophy occuring at the site of insulin injections. As the result of the disappearance of fat in the subcutaneous tissues, depressed areas appear. These are most unsightly and unfortunately these conditions are found most often in young women. No definite cause is known. Various hypotheses have been brought forth from time to time: destruction of fat by the preservative tricresol, the development of an enzyme which destroys the fat at the sit of the injection, the traumatic action of insulin itself on fat tissue. Lamar[9] suggests that these cases may show insulin resistance, brittle diabetes and allergy. Trauma seems to be the most plausible cause known. If a new area is used each day for many days in succession, the fat is likely to reappear and the depression fill in. Therefore, it is suggested that the method of frequently varying the site of the injection be used in these patients. Collens[10] has suggested that continuing to inject insulin in the depressed areas will cause the abnormality to fill in.

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SURGERY IN HYPERTHYROIDISM

The surgical hospital mortality rate associated with exophthalmic goiter has declined steadily to the point where, for the past four consecutive years, there have been no deaths.

Proper preparation of the patient with Lugol's solution, and the judicious addition of the goitrogens in a few instances, have brought about the highly satisfactory result. This present-day situation is directly due to the ability of the internist now to select those very few patients who would not tolerate subtotal thyroidectomy.

Radioactive iodine is an extremely simple and, in many cases, highly effective treatment for exophthalmic goiter. It may some day be proved to be the treatment of choice. At present, the unknown properties of radioactive iodine make it inadvisable to use it as a treatment for any but elderly patients or those who are very poor surgical candidates.

In adenomatous goiter with hyperthyroidism, the ever-present threat of malignancy dictates that surgical treatment shall prevail. The steadily declining hospital mortality rate associated with surgical intervention for this condition is apparent, there having been no deaths after operation for the disease in the last three years at the Mayo Clinic, and only two in 1946.—Edward S. Judd, M. D., in The Journal-Lancet.

GOLDEN MOLD

First announced in December of 1948 as duomycin, the new antibiotic aureomycin (the new name was adoped in January, 1949), has come a long way since its introduction.

The latest discovery in the case history of the golden mold is that it is a potent growth accelerator, producing effects beyond those obtainable with any known vitamin. In animal experiments which cast the antibiotic in a spectacular new role, and which may hold enormous, long-range significance for the survival of the human race in a world of dwindling resources and expanding populations, aureomycin has increased the rate of growth of hogs by as much as 50 per cent, according to Dr. E. L. R. Stokstad and Dr. T. H. Jukes of the Lederle Laboratories Division of American Cyanamid Company.

Although aureomycin's hitherto unsuspected nutritional powers promise to be of importance primarily in extending the world's meat supply and decreasing its production costs they may also prove directly beneficial to human health—which means you and your children—by aiding the growth of malnourished and undersized children, according to the researchers, who are following through on clinical investigations of this possibility.—Leon G. Davis in Think.

The President's Page

The Medical Licensing Board, fully realizing that there is an acute shortage of physicians in West Virginia, has taken steps to alleviate the situation by changing the requirements for license to practice in this state as follows:

The passing grade for examinations has been lowered from 80 to 75.

An A. B. or B. S. degree is no longer required for licensure by reciprocity.

Foreign graduates are permitted to spend up to four years in hospitals meeting the minimum ACS requirements for approval.

Interns may spend two months doing general practice under the supervision of a licensed doctor and receive credit therefor.

Residents, teachers, and doctors from out of the state may be given temporary license to do locum tenens work.

The medical profession has done everything possible to help relieve the critical shortage of doctors in this state. For thirty years, while this condition has steadily grown worse, we have pointed out to the members of the legislature that a complete medical and dental school is the only real answer. The future health of the citizens of West Virginia is in their hands.

Frank G. Galloway

President.

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Governor Okey L. Patteson

GOVERNOR PATTESON ASKS FOR SCHOOL

"It is most unfortunate, indeed, that the Legislature two years ago did not establish this college (four-year school of medicine and dentistry), because by now the buildings could have been erected and training could be started.

"Therefore, I pray to God that the 50th Legislature will have the courage to assume the responsibility of immediately establishing the medical school."

With these frank words, spoken sincerely, Governor Okey L. Patteson left with the Legislature the important task of deciding whether or not West Virginia is to have a much needed four-year school of medicine, dentistry and nursing.

No stronger plea for constructive action by any Legislature has ever been made by an Executive of this state than that included in Governor Patteson's message presented to the 50th Legislature on January 16, 1951.

It is significant that the interest in the establishment of this school has become statewide during the past two years. Previously, the West Virginia State Medical Association had carried most of the burden. Today large and influential lay groups over the state have joined the ranks of doctors and dentists who are making this fight together with members of the Legislature who understand that we do have a critical shortage of doctors and dentists in this state.

As this editorial is being written, the administration bill providing for the establishment of the school has not been introduced. That the full force of the administration will be behind the measure, there can be no doubt.

We applaud Governor Patteson for his forthright message and for the strong stand he has taken to provide medical and dental students with a complete education within our own state. We hope and believe that the Legislature will take such action as is necessary to assure the establishment and construction of the school without delay.

ON THE DOLE

Doctors in England are "signing on the dole," according to a letter recently received by Dr. F. C. Reel, of Charleston, from a friend living in that country. The following excerpts from the letter, which was written December 17, 1950, are indicative of the plight of the people of that country under a socialized form of government:

"We are still rationed, restricted and controlled. Nationalization is a farce, socialism gone crazy.

There are too many on administrative staff. National industries have suffered a loss of millions of pounds. These losses are passed on to the consumer at higher prices and with resulting higher taxation.

"Everything we buy is taxed. Purchase tax on some things are as high as 66 per cent. The lowest is 33 1/3 per cent.

"Income tax is paid by workers each week, who have deducted from their pay checks as much as 1/5 or 1/4 of the total. We are the heaviest taxed people in the world.

"I have just been told by one of our doctor friends that there are doctors signing on the dole. The health minister has sacked about 2000 registered Rs. These are the second surgeons and second physicians with high qualifications. They are not interns, but we call them specialists so they are without a job."

The more we hear of nationalized this and nationalized that, and the more we read of conditions in a country that has embraced socialized medicine, the more we feel that the doctors in America should continue fighting national control on a round-the-clock, round-the-calendar basis. Nothing should be taken for granted, and we should go along hand in hand with the American Medical Association, which is doing such good work in its National Education Campaign.

INDIGENTS SLIGHTED

The lumbago, shingles and bellyaches of London's poorer element apparently get only half the attention from doctors that similar ailments get in the swankier districts under England's government operated health program.

Certain wealthier districts have an average of one doctor for 1,261 patients, while others average 2,897. It seems to be the "one horse and one rabbit" recipe transferred from the meat pie maker's kitchen to the health program.

Socialized medicine looked cheap to England, but it turned out to be mighty expensive.

Socialization and death have one thing in common; you cannot be either a little bit socialized or a little bit dead. Therein lies the greatest danger.

If in our country we permit the medical profession to be harnessed by socialism, no other group or profession can be safe for long.—The Kanawha Citizen.

THE WAITING LIST IN ENGLAND

A maternity nursing-home during the war used to say that its waiting-list was eleven months. But we can do better than that. The women's waiting-list for our orthopedic ward numbers 170-odd, so with an average of one list case admitted per quarter (the remaining beds being constantly filled with emergencies), the wait is about 43 years.—The Lancet.

GENERAL NEWS

GOVERNOR, INTERIM COMMITTEE FAVOR ESTABLISHMENT OF FOUR-YEAR SCHOOL

Governor Okey L. Patteson, in his message to the 50th Legislature, presented in the House Chamber, January 16, 1951, made a strong plea for the establishment of a four-year school of medicine and dentistry in this state.

This is the second time that the Governor has asked the Legislature to take action to assure the construction of such a school. Previously, the 49th Legislature delayed action by leaving the entire question of the establishment of a school to a Legislative Interim Committee, which was instructed to make a thorough study and report back at the beginning of the next Legislature.

Survey by Deans

The Interim Committee asked Dr. Herman G. Weiskotten, Dean of Syracuse University College of Medicine, and Dr. Wilburt C. Davison, Dean of Duke University School of Medicine, to make a survey in this state and report whether the building and maintenance of such a school would be feasible. The survey was completed in the summer of 1950, and both deans recommended the building of the school. The reports filed with the Interim Committee were printed in the July, 1950, issue of the West Virginia Medical Journal.

Both Doctor Weiskotten and Doctor Davison recommended that the school be built in Charleston. Doctor Weiskotten qualified his recommendation with the statement that the school be located in Charleston "or an area of comparable size, population and accessibility which will better serve the interests of the State as a whole."

A special meeting of the House of Delegates of the West Virginia State Medical Association was held in Clarksburg, November 19, 1950, and that body again went on record unanimously in favor of the establishment of the school as part of West Virginia University. In the resolution that was adopted, it was stated that it is the feeling of the House of Delegates that "the Legislative Interim Committee has assembled sufficient factual data to enable it to report accurately to the legislature with respect to (1) the probable cost of establishment and maintenance; and (2) the proper location for the institution where state funds can be spent most economically to secure the best possible facilities and greatest benefits for the largest number of our citizens."

Interim Committee Approves School

A meeting of the Legislative Interim Committee was held January 17, and press reports on the following day were to the effect that the committee divided fifty-fifty on the location of the school, half of the members present being in favor of Charleston as the location and the others favoring Morgantown.

It was reported by Senate President W. Broughton Johnston that the committee voted unanimously for

the construction of the school, but did not make any recommendations concerning the method of financing. President Johnston explained that committee members feel that this is a matter that should be left to the finance committees of the Senate and House of Delegates.

According to President Johnston and House Speaker William E. Flannery, co-chairmen of the Committee, the formal report will be presented late in January.

Component Societies Act

Following the Governor's address and the action of the Interim Committee in recommending the establishment of the school, several component societies of the West Virginia State Medical Association went on record in favor of the building of the school at Charleston, principally on the grounds of location, population, and clinical material available for teaching purposes.

After the Governor's appeal for the establishment of the school, and up to January 22, 1951, the following component societies of the West Virginia State Medical Association adopted resolutions addressed to the Governor and the Legislature, favoring the establishment of the school at Charleston: Harrison, Logan, McDowell, Mingo, Mercer, Raleigh, Boone, and Summers.

Early in January, the Cabell County Medical Society went on record as favoring the establishment of the school in Huntington. Later, the press reported the opposition of the president of the Huntington Chamber to the building of the school at this time.

The Barbour-Randolph-Tucker Medical Society voted unanimously for a four-year school to be located at a site to be selected by the Legislature.

The administration measure for the establishment of the school, when introduced, will probably be referred either to the finance committees of each house or to the committee on medicine and sanitation in the Senate and the committee on health in the House.

The personnel of these two committees in both branches of the Legislature is as follows:

Senate Committees

Medicine and Sanitation: Dr. Ward Wylie, chairman, and Messrs. Eddy, Love, Traubert, Allen, Swiger, Stemple, Bowers and Jones.

Finance: C. Howard Hardesty, chairman, and Messrs. Allen, Jackson (of Logan), Amos, Bowling, Mitchell, Taylor (of Mingo), Martin, Byrd, Swiger, Winters, Wylie, Hannig, Holden, Reed (of Preston), Jones, Stemple and Bowers.

House Committees

Health: Mrs. Nell Walker, chairman, and Messrs. Moreland (vice chairman), Ambler, Mrs. Drewry, Messrs. Johnston, Knight, Matney, Maxwell, Mullins, Pauley, Thompson, White (of Cabell), Gompers, Hall, Humphreys, Hutton, McCulty, Neal, Rogers and Zinn.

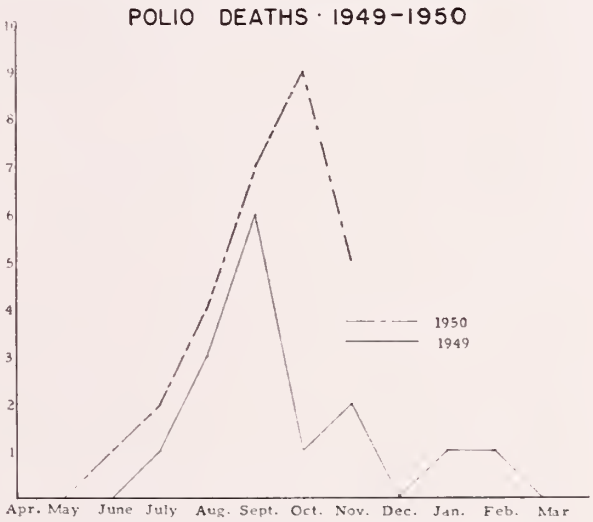
Finance: William P. C. Perry, chairman, June McElwee (vice chairman), and Messrs. Ambler, Ballard, Bowles, Carroll, Fox, Hamilton (of Calhoun), Harmon, Maloney, Martin, Prather, Roberts, Scanes, Stidham, Watts, White (of Boone), Whitt, Honecker, McCulty, Neal, Powell, Rairden, Rogers and Underwood.

1950 SECOND HIGHEST POLIO YEAR IN HEALTH DEPARTMENT'S HISTORY

The incidence of poliomyelitis in West Virginia in 1950 was the second highest recorded in the history of the state department of health. The 377 cases recorded for the 1950 calendar year was exceeded only by the 662 cases reported in 1940. The number of cases reported in 1949 was 343. The majority of the cases reported in 1950 were located in the southwestern part of the state, with sixty-two per cent being found in the area south and west of the Kanawha and New River valleys.

A preliminary study of the case reports reveals that over sixty per cent of the reported cases developed either bulbar or muscular paralysis. This is a somewhat higher incidence of paralysis than has been found previously in other areas and may indicate that the virus found in this area was more virulent than the average or that there were a number of undiagnosed milder cases.

According to Dr. N. H. Dyer, State Director of Health, a statistical analysis of the information contained in the case reports is being made and will be released at a later date. This will involve such items as the relative proportion of males to females, the age groups involved, the distance from other reported cases, the number of children in a family, and the question of sanitation relative to the incidence of the disease.



Poliomyelitis is becoming increasingly prevalent over the nation as a whole and what formerly were considered epidemic years can now be thought of as fairly normal years. Unless there is a reversal of this trend we can expect this disease to become of increasing importance as a diagnostic problem to the general practitioner of medicine.

The accompanying chart shows the number of deaths from poliomyelitis during the 1949 and 1950 polio year (April, 1949 through March, 1949 and April, 1950 through November, 1950). For the comparable period, April to December, there were 15 more deaths from this cause in 1950; 13 deaths reported to the State Department of Health in the nine-month period in 1949, and 28 for that period in 1950.

LIBRARY OF THE

ESTABLISHMENT OF FOUR-YEAR SCHOOL URGED BY GOVERNOR OKEY L. PATTESON

Several requests have been received at the headquarters offices of the West Virginia State Medical Association for copies of Governor Okey L. Patteson's address to the Legislature on January 16, 1951. As the requests have come principally for members of the West Virginia State Medical Association, that part of the Governor's address devoted to the establishment of a four-year school of medicine and dentistry in this state is reproduced in its entirety:

A Medical School for West Virginia

I recommended to the 49th session of the Legislature the establishment of a four-year medical and dental school for our State, and an Interim Committee was appointed to make a complete and exhaustive study of same.

There is a distressing shortage of doctors, dentists, and nurses in most all sections of the United States, and especially is this true in our own State. With the present drain on these professions, as a result of the rearming of our Nation, it is of vital importance that young men and women be trained to take their places. It is the general consensus of opinion that the establishment of this Medical School is a "must" for West Virginia. We cannot afford to delay action on this very important project. Statistics show that there is only one doctor in West Virginia for every one thousand four hundred residents.

Furthermore, the veterans hospitals at Beckley and Clarksburg, which were constructed at a cost of Six Million Dollars each, are standing idle, due to the fact that the Federal Government cannot obtain doctors and nurses with which to staff the two institutions. One wing of the veterans hospital at Huntington has been closed for two years, due to an insufficient number of staff members.

The medical profession and all experts who have studied this problem strongly recommend that a four-year medical school be established immediately. I concur one hundred per cent with this recommendation.

President Truman, in his message on January 8, pointed out the urgency of increasing the supply of doctors, nurses, and other trained medical personnel. In all probability, the Federal Government will give grants to States that take the initiative to establish medical schools for the training of doctors, dentists and nurses.

The matter of financing this school, of course, is of the utmost importance. It is my understanding that West Virginia bottlers of soft drinks, with the exception of one, are actually advocating the imposition of a tax on each soft drink, to finance the proposed medical school. I have given this matter much thought and consideration, and have discussed it with many whom I consider to be leading authorities in the matter of taxation, as well as with our Legislative leaders. From all the information I have been able to gather, it is my opinion that this is a most excellent method in which to finance our much-needed medical school.

There will be many arguments advanced against the establishment of the school, among which will be the lame excuse that it would be a crime to take the nickel drink away from the child. This is an utterly ridiculous statement. The children are paying, in most instances, six or seven cents for a bar of candy that formerly cost a nickel, which doesn't seem to have caused any undue hardships on the consumer, nor has it put the candy companies out of business. Most certainly, parents would be happy to pay one cent tax on each bottle of soft drink, if they knew it were going to mean the training of doctors and other medical personnel, so that in the event of illness in the family, good medical care and attention would be available.

The bottlers of soft drinks have advised that most of the drinks will be advanced anyway, due to the increased cost of production. I am confident that this one cent tax would not be considered a burden, but more of a privilege tax by our citizens who realize the alarming shortage of doctors and nurses. This, of course, is just one suggested form of taxation, as I am sure this body is well qualified to work out the necessary taxes for this purpose.

It is most unfortunate, indeed, that the Legislature two years ago did not establish this college, because by now the buildings could have been erected and training could be started.

Therefore, I pray to God that the 50th Legislature will have the courage to assume the responsibility of immediately establishing the medical school.

I sincerely trust that the location of the Medical School will not inject itself to such an extent that it will defeat the establishment of the school, because most certainly neither sectionalism or selfishness should enter into the selection of a proper site.

The Interim Committee, the West Virginia State Medical Association, and others who have diligently studied this matter, are well qualified to recommend a location which will serve the best interests of our State. Therefore, I leave the question of the location entirely in your hands, but again urge that you do not let it become an involved issue and ruin our chances for this much-needed institution. Regardless of where the school is located, it should be under the direct supervision of the West Virginia University and the Board of Governors.

I cannot urge you too strongly to immediately begin work on this very important measure, and place it on your preferred priority list.

HEART CLINIC CAN CARE FOR MORE CASES

The West Virginia Heart Association has announced that the clinic maintained in Charleston can care for considerably more cardiac cases than were seen during 1950. The record shows that, during 1950 to mid-December, but four cases were referred to the clinic by physicians located in Charleston, and but 19 from the county outside of Charleston. The clinic is maintained for the treatment and diagnosis of patients residing in all of southern West Virginia; however, but three cases from outside Kanawha county have been referred by physicians during the past year.

All indigent patients, or those unable to pay for cardiac consultation, are eligible for treatment and diagnosis, and appointments are made directly with the Kanawha-Charleston Health Department.

HEADS HEART FUND DRIVE

Announcement has been made by the West Virginia Heart Association that Hon. William G. Thompson, of Montgomery, will serve as campaign chairman of the Heart Fund drive, which will begin February 1 and continue throughout the month.

Mr. Thompson is a prominent attorney of Fayette County and is president of the board of governors of West Virginia University. He is immediate past district governor of Rotary International.

NATIONAL CONGRESS ON MEDICAL SERVICE

The 1951 session of the National Conference on Medical Service will be held at the Palmer House, in Chicago, Sunday, February 11, with Dr. R. D. Bernard, of Des Moines, Iowa, presiding as chairman.

RELOCATIONS

James C. Quick, M. D., of Charleston, is serving a two-year residency at St. Elizabeth's Hospital, in Richmond, Virginia.

* * * *

Dr. Willard Pushkin, of Charleston, left January 1 for Pittsburgh where he is taking postgraduate work at Montefiore Hospital.

* * * *

Comdr. Bruce H. Pollock (MC) USNR, of Huntington, is now serving as flight surgeon for Carrier Air Group 102. His present address is USNAS Com. Air Pac. C. V. G. 102, San Diego, California.

SOUTHERN MEDICAL IN DALLAS

The 45th annual meeting of the Southern Medical Association will be held in Dallas, Texas, November 5-8, 1951. Dr. Robert J. Wilkinson, of Huntington, will be installed as president of the Association at that meeting, and already many West Virginia doctors are arranging to attend the sessions.

Dr. Andrew E. Amick, of Lewisburg, is a member of the Council, and Dr. Howard A. Swart, of Charleston, is chairman of the section on orthopedic and traumatic surgery. Dr. J. J. Brandabur, of Huntington, continues as chairman of the section on industrial medicine and surgery.

Mrs. V. E. Holcombe, of Charleston, is president elect of the Woman's Auxiliary to the Southern Medical Association, and she will be installed as president at the Dallas meeting.

AMERICAN CONGRESS OF PHYSICAL MEDICINE

The 29th annual scientific and clinical session of the American Congress of Physical Medicine will be held September 4-8, 1951, at the Shirley-Savoy Hotel, in Denver, Colorado. All sessions will be open to physicians and other professional personnel, and full information concerning the program may be obtained by writing to the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

ADMIRAL BOONE NEW VA HEAD

Vice Admiral Joel T. Boone has been named medical director of the veterans administration to succeed Dr. Paul D. Magnuson, who has served in that capacity since 1948.

Admiral Boone, who has served as personal physician to three Presidents, recently retired from the U. S. Navy.

NEW DISTRICT HEALTH OFFICERS

Dr. David C. Prickett, of Shinnston, has been named by Dr. N. H. Dyer, state director of health, as health officer for District No. 4, with headquarters at Weston.

Dr. Lyle J. Roberts, who was released from the Navy January 1, 1951, with the rank of Captain, has been named health officer for District No. 6. His headquarters will be at Martinsburg. He succeeds Dr. H. T. Marshall, resigned.

ANNUAL SECRETARIES-PR AND PRESS-RADIO CONFERENCES IN CHARLESTON

The annual Press-Radio Conference, sponsored by the West Virginia State Medical Association, is being held as this issue of The Journal is on the press (January 28).

Newspapers and trade and professional journals, and broadcasting stations from all over West Virginia have been invited to have representatives at the conference, the prime object of which is to seek ways and means to cement and improve relations between the medical profession and these groups.

A proposed doctor-press-radio code of ethics is to be presented for the consideration of representatives of the various groups who attend the conference. The code has been prepared by Dr. E. Lyle Gage, of Bluefield, representing the medical profession; Francis P. Fisher, of the Parkersburg News, and immediate past president of the West Virginia State Newspaper Council; and George H. Clinton, Parkersburg, manager of Radio Station WPAR and president of the West Virginia Broadcasters' Association.

The conference will be in charge of the Association's public relations committee. Dr. John F. McCuskey, of Clarksburg, and Dr. Paul L. McCuskey, of Parkersburg, are co-chairmen of the committee.

An interesting program has been arranged, and short addresses will be presented by representatives of the press, radio and medical profession. A dinner will follow the afternoon conference at which Richard Harkness, NBC Washington correspondent, will be the guest speaker. Those attending the conference will be the guests of the State Medical Association at the dinner. Mr. Harkness will discuss the present international situation with particular emphasis on the conflict in Korea, and a question and answer period will follow.

Special Meetings Precede Conference

A special meeting of the Association's public relations committee is scheduled for Saturday afternoon, January 27, and will be followed by a meeting of the fact finding and legislative committee. The programs of the two committees will be discussed and agreed upon at that time.

A meeting of the chairmen of some of the other active committees will also be held Saturday afternoon, and the Association's complete program for 1951 discussed.

The legislative program and the Association's overall program for 1951 will be presented formally at a dinner meeting of the Council scheduled for Saturday evening.

The annual Secretaries-PR conference is scheduled for Sunday morning, January 28, at 10:30 o'clock. The conference will be attended by secretaries and PR chairmen of the Association's twenty-nine component societies. The program will be informal and will include a full discussion of administrative matters affecting representatives of the groups present. Many of those attending the Sunday meetings will attend the press-radio dinner that night.

STATE HEALTH CONFERENCE MAY 10-12

The Twenty-seventh Annual State Health Conference will be held at the Prichard Hotel, in Huntington, May 10-12, 1951. Announcement of the dates of the meeting was made jointly by Dr. N. H. Dyer, of Charleston, state director of health, and Dr. A. Glenn Evans, of Fairmont, first vice president of the West Virginia Public Health Association.

Formerly a joint meeting of health officers and the West Virginia Public Health Association, the conference this year will for the first time be held in cooperation with the West Virginia State Medical Association and West Virginia University School of Medicine.

Over 500 doctors, educators, and public health workers are expected to attend the meeting. There will be four general sessions and two section meetings. The program will highlight the medical aspects of the civil defense program.

NEW PEDIATRIC CLINIC

A pediatric clinic offering total care to medically indigent children will be opened the first of February at the Monongalia Health Center, in Morgantown.

The clinic has been unanimously approved by the Monongalia County Medical Society, and the clinicians asked permission to serve without compensation. The services of a part-time medical social worker and nutritionist will also be provided. The necessary laboratory equipment will be purchased as needed.

The clinic will be held weekly, and it is planned to use as many facilities as may be made available by West Virginia University.

CONFERENCE ON SCHOOL HEALTH

Dr. Fred V. Hein, a member of the staff of the AMA Bureau of Health Education, Chicago, will serve as consultant to a working conference on school health, which will be held at Jackson's Mill, April 2-4, 1951.

The conference is being sponsored by a joint committee composed of representatives of the West Virginia Supervisors' Association, the West Virginia State Department of Education, the West Virginia State Department of Public Health, and the School of Physical Education of West Virginia University.

NEW UNIT FOR PREMATURE NURSERY

The new unit being built in connection with the premature nursery, at the Herbert J. Thomas Memorial Hospital, in South Charleston, is nearing completion. When completed this unit will increase the capacity by eight beds.

PG COURSE IN CHEST DISEASES

The 4th annual postgraduate course in diseases of the chest, sponsored by the American College of Chest Physicians, Pennsylvania Chapter and the Laennec Society of Philadelphia is scheduled for the Hotel Warwick, in Philadelphia, March 26-30, 1951. The course will emphasize the recent developments in the diagnosis and treatment of chest diseases. Applications should be mailed to the American College of Chest Physicians, 510 North Dearborn Street, Chicago, Illinois.

TUBERCULOSIS ABSTRACTS*

WHY DO PATIENTS GO AWOL?

The physician in general practice, the health officer, the public health nurse, the tuberculosis worker, the patient's family, and, in fact, the whole community has a stake in solving the problems presented by the tuberculosis patient who walks out of the hospital against medical advice. What makes him such a difficult problem? We know that the emotional and mental virtues and vices found among the tuberculous are found equally among any other cross-section of the population.

The tuberculous patient is a difficult problem because his own problem is difficult. His inner resentment will soon express itself in hostility to the attendants, the nurses, and the physician. His family and friends also become subjects of suspicion. It is then that he asks himself—Why tolerate it longer? You can rest at home, why not get out? The family needs your help anyhow with domestic and economic problems. You're not making any headway here; you're just another case of tuberculosis. They don't understand. The patient complains about the food, about the lack of attention, about the staff's indifference. He will not take his rest, delights in breaking rules. Finally, he quits and walks out against medical advice. His act is a rebellion against himself and against the authority sanatorium life represents. He must rebel or explode.

Not all tuberculous patients react this way. Those who have internal strength, or who receive from others the psychological and social supports that hospitalization demands, can pull through and use sanatorium life as an opportunity to plan for a constructive post-hospital career.

Many patients need help. This is attested by the fact that failure of hospitalization, reflected in discharge against medical advice, is found in tuberculosis to a degree unparalleled by any other disease. There may be some who are beyond help. It is difficult to penetrate an embittered outlook or chronic alcoholism that is well aged by the years. For a few, compulsory hospitalization seems the only solution. However, there are more positive and more helpful measures which should be explored before the resort to force.

As a minimum, the tuberculous patient needs emotional and psychological preparation for hospitalization. No one can do this better than the physician. If he takes the time to explain the disease and its impact upon the life of the patient and his family, the physician will have made a wise and humane investment of energy and effort.

There is no easy, magic way. The recalcitrant tuberculous patient is a serious problem for society because his disease is a serious problem for him. To the extent that the psychological and social supports are provided, the problem becomes an easier one for the patient and for everyone concerned.—Why Do Patients Go AWOL? William B. Tollen, Ph.D., NTA Bull., July, 1950.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

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—Editorial: Dramamine,
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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

OBITUARIES

ERNEST FRED GOTT, M. D.

Dr. Ernest Fred Gott, 63, of Charleston, died of heart disease December 31, 1950, at his summer residence in St. Albans.

Doctor Gott was born in Hinton, son of the late John R. and Margaret (Carr) Gott. He received his M. D. degree from the College of Physicians and Surgeons, Baltimore, in 1915, and was licensed that same year to practice medicine in West Virginia.

He served with the rank of first lieutenant as surgeon on a transport during World War I. Upon his release from the service, he located at Princeton, moving to St. Albans in 1919. He located at Charleston in 1923, where he continued in active practice until a few months ago when he was compelled to retire on account of ill health.

Doctor Gott served as examining physician for the Workmen's Compensation Fund, 1941-1945. He was an honorary member of Kanawha Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by a son, William, of Charleston; two daughters, Jo Ann, a student at West Virginia University, Morgantown, and Elizabeth Jane, of Charleston; and a sister, Mrs. W. N. Palmer, of Easton, Maryland.

* * * *

MORGAN T. MORRISON, M. D.

Dr. Morgan T. Morrison, 81, of Sutton, died December 21, 1950, at his home in that city. Death was attributed to diseases incident to advanced age.

Doctor Morrison was born in Sutton and received his high school education in local schools. He was graduated with honors from the University of Louisville School of Medicine in 1891. After serving for four years as a member of the staff of the Weston State Hospital, he located at Sutton where he continued in active practice until a short time prior to his death. His specialty was EENT.

He served as a member of the public health council (now medical licensing board) for more than thirteen years. He served as secretary and for two terms as president of the Central West Virginia Medical Society, and for four years as a councillor of the West Virginia State Medical Association.

Doctor Morrison had held several public offices in his home community. He was a former county health officer; postmaster at Sutton for eight years; member of the House of Delegates from Braxton county, 1912-13; delegate to the Democratic national convention in 1932; chairman Democratic executive committee for Braxton county; chairman of the Braxton County Tuberculosis Association; and president of the Braxton chapter of the National Foundation for Infantile Paralysis.

Doctor Morrison was an honorary member of the Central West Virginia Medical Society, the West Virginia State Medical Association, and the American Medical Association.

He is survived by one son, Dr. William B. Morrison, of Columbus, Ohio.

* * * *

BEVERLY L. NOE, M. D.

Dr. Beverly L. Noe, 79, of Newton, Roane County, died January 20, 1951, in a hospital at Spencer. He had retired from practice several years ago on account of ill health.

Doctor Noe received his M. D. degree from Barnes Medical College, St. Louis, and served his internship at Johns Hopkins Hospital, in Baltimore. He was licensed to practice in West Virginia in 1907.

Besides his wife, he is survived by a daughter, Mrs. Abel Boggs, of Valley Forge.

* * * *

ISAAC TAYLOR PETERS, M. D.

Dr. Isaac Taylor Peters, 60, of Princeton, died of congestive heart failure at a hospital in Huntington, October 7, 1950.

Doctor Peters was born at Camp Creek, West Virginia, and received his academic education at Concord State College, Athens. He received his M. D. degree from the Medical College of Virginia in 1918, and was licensed to practice in West Virginia in 1919. He located for the practice of medicine at Maybeury and moved to Princeton in 1944.

Before enrolling at the Medical College of Virginia, he served as superintendent of schools in McDowell County and afterwards served for one term as president of the McDowell county board of education.

Doctor Peters was an honorary members of the Mercer County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

ONE DAY AT A TIME

An elderly woman with heavy household cares saw the day when she could carry on no longer. The burden became too great. Her strength was waning day by day, and each new day the duties for which she was responsible seemed to mount higher. One day the physician called, and, seeing how little strength she had, told her she would have to give up for a little while, and she became a patient in the hospital. Only then did she realize how exhausted she was. After a few days, she thought of the affairs at home, and became restless. "Doctor," she said, "how long will I have to lie here?" The answer was, "Only one day at a time." That was all he said, but it served to strengthen the virtue of patience in her.

And what lesson do these six magic words teach us? "How long shall I have to pore over books before I can go out and make some money?" "How long shall I have to slave in order that I may provide a livelihood for the family?" "How long shall I have to bend my back to pick and shovel to build highways?" It is not a day's work that breaks us, but a week's work, and a month's work, and a year's work—all crowded into one day. The answer to all these questions is the same: "Only one day at a time."—The Morton Messenger.

COUNTY SOCIETIES

BARBOUR-RANDOLPH-TUCKER

Dr. Albert L. Wanner, of Wheeling, was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society, held January 18, at the City Hall, in Belington. He presented an interesting address on "Epilepsy and Allied Disorders." The speaker participated in a question and answer period at the conclusion of his address.

The Society went on record unanimously in favor of the establishment of a four-year medical school in West Virginia at a place to be designated by the legislature. The original motion fixed Charleston as the place of location, but it was amended to leave the matter of site to the legislature.

The following resolution with reference to members serving in our armed forces was unanimously adopted:

"Be it hereby resolved, that the Barbour-Randolph-Tucker County Medical Society officially inform the public insofar as possible as to the means by which doctors may be called into the service. The exact date of such call will be published at the earliest possible moment for three editions in the daily and weekly papers in Barbour, Randolph and Tucker counties and also in the Clarksburg paper which has wide coverage in the tri-county area.

"It should be emphasized that a call for a physical exam or to temporary duty as a reservist does not necessarily mean that the doctor is to cease practice in this locality. This resolution is in accord with resolutions adopted by the Veterans of Foreign Wars and American Legion in regard to discrimination against those former members of the armed services and the reserves by employers and the public.

"We further propose that should any member of the B-R-T Society be called into the armed services, even for a short period, that he write all chronically ill patients under his care, all those who are depending upon his attendance in confinement cases, and that records be transferred to a physician selected by the patient concerned, and that on the return of the doctor from the armed services these records be returned to him by the physician in whose keeping they have been entrusted during the emergency.

"We further propose that the member who receives a call to active duty immediately contact the Secretary of the Barbour-Randolph-Tucker County Medical Society who will publish the information desired in the papers mentioned at the expense of the Society, and that form letters and reply cards may be furnished to the doctors called into the service at the expense of the Society."

Dr. Charles L. Goodhand, of Parkersburg, presented a paper on the subject of "Some Obstetrical Emergencies" at the regular monthly dinner meeting of the Barbour-Randolph-Tucker Medical Society, held in Parsons, December 21, 1950.

The speaker stated that the old concept of birth being a natural physiological process is giving way before modern knowledge. He presented some interesting pointers with reference to the management of placenta praeva, abrupto placenta, ruptured uterus, inversion of the uterus, post partum hemmorrhage, eclampsia and prolapsed cord.

The following officers were elected for the ensuing year: President, Semon M. Lilienfeld, Parsons; first vice president, Thomas Woodford, Elkins; second vice president, Louis Nefflen, Elkins; secretary, Donald R. Roberts, Elkins; treasurer, W. G. Harper, Elkins; delegate to the House of Delegates, Hu C. Myers, Phillppi; alternates, Ralph Woodford, Philippi, Charles Leonard, Elkins, and Robert E. Smith, Parsons. Dr. Semon M. Lilienfeld, of Parsons, was reelected to the board of censors.

* * * *

CABELL

Dr. Henry M. Thomas, of Baltimore, civilian consultant to the Surgeon General's Office, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, held in Science Hall of Marshall College, Huntington, January 11. He presented an interesting discussion on the history of the United States Army Medical Department and the present needs for medical and dental personnel.

Dr. Edwin G. Riley, of Charleston, Area Administrator for the UMW Welfare Fund, also spoke briefly concerning the medical aspects of the Fund.

At the business session following the scientific program, Dr. J. H. Baber, of Huntington, was elected an honorary member of the Society.

The Society went on record unanimously in support of a resolution in favor of the establishment of a four-year school of medicine to be located in Huntington.

Dr. T. Kerr Laird, of Montgomery, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, held December 14, 1950, in the auditorium of the Marshall College Science Hall, in Huntington. His subject was "Inflamatory Diseases of the Thyroid Gland."

Following Doctor Laird's presentation, numerous photomicrographs of the histological picture of the various diseases discussed by him were shown by Doctor Ludwig, pathologist at the Laird Memorial Hospital, Montgomery.

Dr. Herbert R. Brown, director of the American Red Cross Procurement Program for the eastern part of the United States, spoke briefly on the establishment of a Red Cross Procurement Center in Huntington.

Dr. Hiram W. Davis, member of the staff of the Huntington State Hospital, was accepted as a member of the Society by transfer from the Richmond (Virginia) Academy of Medicine.

Dr. F. X. Schuller was elected to honorary membership in the Society.—James A. Heckman, M. D., Secretary.

CENTRAL WEST VIRGINIA

Dr. I. Ewen Taylor, of Huntington, was the guest speaker at the regular monthly meeting of the Central West Virginia Medical Society, held at Buckhannon, January 25, 1951. His subject was "Common Anorectal Diseases."

At the business meeting following the scientific program, Dr. Worth B. Forman, of Buckhannon, was elected president for 1951. Dr. Claude R. Davisson, of Weston, was elected vice president, and Dr. Theresa O. Snaith, also of Weston, was reelected secretary-treasurer. Dr. C. R. Davisson was continued in office as chairman of the public relations committee.—Theresa O. Snaith, M. D., Secretary.

* * * *

FAYETTE

Dr. H. C. Huntley, of the State Department of Health, Charleston, spoke on the subject of "Common Communicable Diseases" at the regular monthly meeting of the Fayette County Medical Society, held January 9, at the Hotel Hill, in Oak Hill. His paper was illustrated with charts and slides, and the presentation was followed by an interesting discussion by the members present at the meeting.

Dr. Fred Richmond, of Beckley, presented an interesting discussion of the "whys and wherefores" of the present system of hospitalization of members of the United Mine Workers of America.

Dr. M. G. Hresan, the new president, announced the appointment of Dr. J. N. Jarrett as 1951 chairman of the public relations committee.

The Society adopted a resolution favoring the establishment of a four year school of medicine and dentistry in West Virginia.—Thomas C. Sims, M. D., Secretary.

* * * *

FORT HENRY ACADEMY

Dr. Cameron Haight, Professor of Surgery (Thoracic) at the University of Michigan Medical School, was the guest speaker at the regular meeting of the Fort Henry Academy of Medicine held in Wheeling, December 18, 1950. His subject was "Tumors of the Mediastinum." Discussion was opened by Dr. A. K. Butler and Dr. A. M. Decker, of Wheeling. The meeting which was preceded by a dinner at the Fort Henry Club, was attended by eighty-five members.—Robert U. Drinkard, M. D., Secretary.

* * * *

McDOWELL

At the regular monthly meeting of the McDowell County Medical Society, held January 10, at Welch, a resolution was unaimously adopted, recommending to the legislature the establishment at Charleston of a four-year school of medicine and dentistry.

The American Academy of Pediatrics' film, "The Problem Child," was shown following the business session.—Ray E. Burger, M. D., Secretary.

MERCER

Dr. W. A. Shafer, of Bluefield, was the guest speaker at the regular monthly meeting of the Mercer County Medical Society, held at Pete's Grill, in Bluefild, January 15, 1951. His subject was "Prefrontal Lobotomy," the speaker discussing its history, indications, technique, and post-operative results.

The paper was discussed by Dr. E. L. Gage and Dr. R. G. Combs.

The president announced the appointment of committees to serve during 1951. The following is a list of the chairmen of the various committees: Public relations, Ben W. Bird; legislative, Wade H. St. Clair; Associated Hospitals, E. L. Gage; cancer, M. W. Sinclair; diabetes, O. G. King; and, disaster, W. A. Shafer.

The Society went on record unanimously in favor of the establishment at Charleston of a four-year medical, dental, and nursing school.

The anual Ladies' Night banquet of the Mercer County Medical Society was held December 18, 1950, at Pete's Grill in Bluefield. The Bluefield College Male Quartet entertained during the dinner hour.

At a business meeting following the banquet, it was ordered that the Society sponsor the formation of a county health council, and Dr. Richard C. Neale was named as the representative from the Society.

The following officers were elected for 1951: President, R. H. Fowlkes; vice president, Karl Weir; secretary, R. C. Gatherum; treasurer, D. V. Kechele; delegate to the House of Delegates, E. Lyle Gage; alternate, Daniel Hale, Princeton; and censor, B. S. Clements, Matoaka.—R. S. Gatherum, Jr., M. D., Secretary.

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MINGO

At the regular monthly meeting of the Mingo County Medical Society, held January 17, at Welch, a resolution favoring the establishment of a four-year school of medicine and dentistry at Charleston was unanimously adopted.

Dr. I. C. Haines, head of the orthopedic department at the Memorial Hospital in Williamson, was the guest speaker at the regular December dinner meeting of the Mingo County Medical Society. The speaker described injuries of the hand, with particular emphasis on fracture of the phalanges, metacarpals and thumb, and discussed the clinical entities such as the snapping finger and mallet finger.

Dr. S. G. Zondo, president-elect, presided at the meeting in the absence of the president, Dr. J. C. Lawson.—E. T. Drake, M. D., Secretary.

* * * *

POTOMAC VALLEY

At the regular January meeting of the Potomac Valley Medical Society, Dr. M. H. Maxwell, of Moorefield, was elected president, and Dr. G. E. Hartle, also of Moorefield, secretary-treasurer. The new officers will serve during 1951.—Harry Coffman, M. D. Secretary.

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THE COMMON RESPIRATORY DISEASES OF INFANTS AND CHILDREN

By E. H. BAXTER, M. D.,
Columbus, Ohio

The diseases referred to in the title of this paper still, after many generations, constitute a pertinent problem in the field of pediatrics. A certain textbook of pediatrics of more than 100 years ago devotes much space and material to these conditions. Recently, interest has increased greatly as a result of attempts to understand the etiology and classification of these respiratory infections. Further interest has been aroused by attempts to apply the antibiotics and sulfonamides in the treatment of these condtions.

The physician who is successful in the treatment and surely in the prevention of these common ailments will, of course, have achieved his mark of distinction and a place in the Hall of Fame. Numerous theories of etiology and methods of treatment of these conditions prevail. Many of these theories are based on long observation and clinical experience as well as the result of research. Perhaps then, we shall not be too far afield if we add our own ideas to those which are already prevalent. It will be the aim, therefore, not necessarily to add many new ideas and theories to what is already known but rather to recapitulate and crystallize the thought that has gone on before and to present anew some of the old ideas and previous work in a new light.

Two things make it very difficult to evaluate accurately many of the studies of respiratory conditions: First, the variability of the severity of epidemics of respiratory infection from one season to another and from time to time within the year and in various localities in the course of an epidemic; Second, the resistance of the individual varies greatly from time to time, specifically against certain infectious agents either viral or bacterial in character. Consequently, any therapeutic agent from a standpoint of clinical observation is likely to be evaluated on the basis of its being used at the time the infection disappears.

One may define the common cold and common respiratory diseases as an inflammatory process of the mucous membranes of any or all parts of the respiratory tract. The name of the disease depends upon the area of the mucous membrane of the respiratory tract that is involved, beginning with the common cold in the nasal mucosa and passing through the nasopharynx, oral pharynx, larynx and bronchial tubes, and ending with pneumonia in the alveoli. The process may be acute, chronic or recurrent, i. e., there may be complete recovery between attacks or an individual attack may persist for a great length of time due to the presence or absence of secondary invading organisms.

It is recognized, of course, that man from the youngest to the oldest is susceptible to these infections. The infant of a few hours or days may acquire the disease with equal ease and severity to that of his older sibling. The incidence of colds and other respiratory infections is relatively high. It can be expected that the average child

*Presented before the 83rd Annual Meeting of the West Virginia State Medical Association, at White Sulphur Springs, July 29, 1950.

or young individual will have an average of three or four of these infections throughout the year.[1] The incidence is concentrated almost in epidemic form in January and February, again in April and May, and then in September and October. It is interesting to note that these correspond in each instance with the reassembling of children in school and in the temperate zone with their release from school in the spring, with more exposure to temperature changes. The congregation of children in larger numbers, as is the case in school with its natural stimulation, and attenuated method of living with an increase in the possibility of exposure is worthy of investigation.

Any etiologic discussion of these respiratory diseases must be approached from four points: (1) the character of the infecting agent together with its severity, virulence and resistance to treatment; (2) the condition of the child, including his ability to withstand trauma and infectious processes (this would include his inherent intracellular physiochemical processes which set him off from all other children); (3) it will include the anatomical structure of his head, including the sinuses, character of the bronchial tree, presence or absence of abnormalities within the respiratory tract, such as abnormal tonsils, adenoids, and variations in the structure of the sinus appendages; (4) consideration must be given to the environment in which the child finds itself. In this respect such things as housing, food, sunshine, amount of attention, emotional strain and stress, stimulation (both physical and mental) and amount of rest are important. This together with an understanding of the energy balance of the child at any given time is significant.

It is well understood now from the work of Dochez[2] and others that the common cold is a specific disease caused by a virus, one or more, which is responsible for the early symptoms, transmission and spread throughout the respiratory tract. The secondary stage is undoubtedly due to a bacterial invader. Rapid transmission of colds and some of the other upper respiratory infections result from droplets which float in the air in a dry form for a long period of time. Large droplets of excretion from the nasal passages fall to the ground before evaporation is complete whereas the smaller ones evaporate completely and leave only the dry viral material to float in the air. Identification of these viral agents is very difficult or impossible, although some can be isolated from the nasal secretion of known cases, transmitted to others, and reisolated again. Since it is impossible to classify these by known laboratory methods of diagnosis, classifications have arisen only as the result of better understanding of the pathogenesis and etiology of the disease and by the elimination of known bacterial forms of these diseases. The clinical implications and symptoms represent the main method of differentiation. A tangible classifica- of these viral respiratory infections has been devised by Dingle.[3] This has been arranged in the form of a clinical spectrum with various areas of involvement given names of recognized clinical patterns. In this such symptoms as malaise, fever, aching and sore throat may have varying significance and by their predominance determine the overall picture. It is possible that more than one agent may produce a given type of illness. Most of the conditions in the Dingle spectrum do not exist as uncomplicated entities but in combination with involvement of one or more of the contiguous areas affected. For example, it is difficult to differentiate bronchitis from viral penumonia. Recently there has appeared a condition known as primary pneumonitis[4] in young infants which differs somewhat from the viral pneumonia in its severity and age incidence. Clinical pictures similar to some of these diseases included in the viral spectrum may be produced by influenzae A ranging in severity from latent or mild form to an extremely severe involvement of all or part of the respiratory tract. Beta hemolytic streptococcus likewise may produce such a picture, especially in the tonsillar and pharyngeal areas. However, these conditions can be recognized by laboratory methods. It is quite evident, therefore, that an accurate clinical and laboratory diagnosis of the various forms of these diseases is necessary if an intelligent approach is to be made to their therapy.

The secondary invading organisms account for many of the complications and the secondary symptoms of these infections. Characteristically, certain organisms complicate infections in various parts of the respiratory tract, such as pneumococcus, the ear; streptococcus, the throat and lymph nodes, and the influenzal organism, the meninges and bronchial tree. Influenzal meningitis may appear after several recurrent attacks of bronchitis or colds in one or more members of a family.

It is well to point out, however, that certain structural defects or conditions about the head involving respiratory passages and accessory sinuses may be responsible for both the continuation and the initiation of these disease processes. Contrary to the belief of some, the accessory

nasal sinuses are open, partially pneumatized, and the orifices are patent at birth or very soon thereafter and are capable of being infected. Therefore, acute and chronic sinusitis may be looked to as a focus of continuing infection from which acute respiratory disease may be lighted at any time. A deflection of the nasal septum with accompanying or primary enlargement of the turbinate may prevent proper drainage and aeration of the sinuses. In the newborn the nasal septum may be dislocated from the groove in the roof of the maxilla and, if not replaced immediately after birth, will be responsible for a deflection of the anterior aspect of the septum. Malformation of the dental arches with malocclusion of the teeth *per se* does produce mouth breathing irrespective of the patency of the nasal passages. This again may be conductive to the development of respiratory infection. There may be an abnormality in the size of the nasal passages sufficient to prevent the passage of sufficient air to permit proper aeration of the lungs. Many children with a dolichocephalic type of head belong in this group. Such a type of anatomic structure is likely to be an hereditary trait, and to this extent heredity is an etiologic factor. In this connection it is well to suggest the possible etiologic relationship between funnel chest with its proportionate reduction in the amount of air capacity of the lungs due to compression of part of the lung or displacement of the mediastinum thus producing areas of low resistance within the chest. Congenital atelectatic areas, especially in the lower and upper right lobes, may be responsible for production of bronchiectatic areas later in the child's life with areas which are susceptible to repeated infectious processes.

There are many environmental factors which should be considered in the etiology and production of respiratory diseases. Recently, attention has been focused on the effect of chilling the body in producing colds. However, this can be considered only in conjunction with other evidence of poor hygienic conditions, such as poor housing with overcrowding, and cold, damp buildings and floors, as well as overheating and drying of the air without circulation and replacement of it. Too little and too much clothing are equally unfavorable. Although phenomenal advances have been made in children's clothing in the last few years, yet, when practically all of the lower extremities are exposed in cold weather, one wonders if chilling of the body is sufficient to produce the symptoms of a cold. Perhaps after children have been exposed to an environment of this type for a long period, there is a survival of the fittest, and only those children who are able to withstand this environment are free of infection.

Each individual who survives the ordeal of birth and the first day thereafter is endowed with a certain amount of resistance which may be called basal resistance or that amount that is necessary to keep body and soul together. In addition, each person is endowed with an extra amount in varying degrees from a small to a very great excess. It is this variation in ability to withstand trauma that distinguishes one individual from another in this particular respect. It has nothing to do with the physical size, race, economic status or station in life. It is a congenital factor and, while it may be hereditary and familial, it is not necessarily so. It is a factor which many times causes the physician to be mistaken in his prognosis of either severe or mild infection, in one instance resulting in recovery and in the other fatally. It is this same factor which in later life may and does cause much of the psychosomatic illness of adults as the result of their inability to do those things both mental and physical which are beyond their capacity and ability to perform but which, nevertheless, they try persistently and consistently to accomplish with resulting overstimulation and breaking down of their general resistance. Surely one problem of the physician or pediatrician who is supervising the care of a child over a period of time is to evaluate his ability to withstand traumatic incidents and on the basis of experience and examination of the child together with long range observation to guide that child into channels that will be consistent with his ability to withstand difficulties and where he may be of most value to himself and to society. Certainly no other individual or group of individuals than the physician is capable by virtue of experience, training, and knowledge to make a decision in such a vital matter.

If the universality of susceptibility to colds is assumed, then this variation in inherent resistance is sufficient to account for the difference in the number of colds. There are infants and children who very rarely are free from some form of respiratory disease while others have no form of it without any apparent difference in their environmental situation. Those children who are in a constant state of respiratory disease throughout the entire winter season may be considered from an hereditary standpoint, especially when both parents and grandparents are so afflicted. Yet, it is difficult to know whether a child has inherited a structural defect which makes him

susceptible or is exposed to excessive amounts of the infectious agent.

Emphasis should be placed upon the role of overstimulation and exertion in the production of respiratory diseases as well as in reducing the ability of the individual child to withstand any infectious agent when he comes in contact with it. In our modern civilization with exposure to stimuli from all over the world at a moment's notice, even adults are found to be confused most easily. What, therefore, must be the effect of all this stimulation on the plastic mind of the small and younger generation? The fact that children are used to portray and complete the unfulfilled desires of parents and are projected into a society at an age younger and in a more advanced manner than the parents ever were, results in a depletion of the child's energy with a resulting frustration. No longer are we satisfied to send the child to school at the age of six but he must attend kindergarten, pre-school and nursery school, and even pre-nursery school beginning at the age of 18 months. It is possible that some children may withstand this exposure in a satisfactory manner, yet the majority cannot. To subject a child to nursery school for five days a week at the age of 2 or 3 years is asking too much. One, two, or three days per week, depending upon the ability of the child to withstand the physical and mental exertion necessary for his participation in the school, offers a better regimen. It is common experience for physicians to have mothers tell them that the child was perfectly well when staying at home but after being in nursery school or pre-school or first grade for only 2 days, he acquired a respiratory infection which necessitated his absence from school for 1 or 2 weeks and which recurred and multiplied throughout the entire year. Since the factors involved in the maturation of a child for school are not well understood, the immature child of 5, 6, 7, or 8 years when he starts to school is subjected to the same undue strain and overstimulation. Surely the parents of all children should be cautioned by their physician against this type of scholastic and academic overstimulation.

In the very young child there is risk of parental overstimulation. Good advice to parents is to omit any attempt to teach the child but merely to provide facilities whereby he can learn as he desires. While this includes exposure to knowledge, no effort should be made to find out what the child knows. This repetition and recital of things that the child has learned is responsible for this overstimulation. The desire also of parents to see their children excel in school, music, dancing, and socially as well, all are evidence of this type of exertion. It is the wise parent who is willing to allow his child to develop in the lines and channels he desires. Again, it is the responsibility of the physician to aid the parents in the selection of these channels and to protect them and the child in the decision. Thus, a prominent psychosomatic factor is evident in the development of colds.

Even though specific dietary deficiencies and irregularities may not be responsible for respiratory infections, nevertheless, there are certain dietetic suggestions that are necessary for good health. First, the child should have opportunity to ingest an adequate amount of protein which is sufficient for growth and tissue replacement and which is obtained only from meat, eggs, milk and some vegetables, without emphasis on carbohydrates and fats except as energy producing foods. If the family can provide an adequate amount of citrus fruit in the dietary, then the possibility of adequate and balanced diet can be assured. The physician should be familiar with the growth cycles of the child, thereby recognizing the times when the child's desire and requirement for food are decreased by natural growth factors as contrasted to that decrease produced by infection or illnesses in the child. It is well to follow the idea that the child should have an opportunity to eat all he wants of anything he wants that is available at any given meal if the parents are able to provide and to understand the foods that are necessary in his dietary. On such a regimen the child will have a balanced diet over a period of a week or a month rather than from meal to meal. The diet should include a sufficient amount of the vitamins that are known to be associated with growth and development. The relation of the ingestion of a large amount of vitamins in the prevention of cold is not clear at this time.

In the common cold the pathology involves primarily the nasal mucosa and is initiated with edema of[5] the submucosa with an infiltration of leukocytes. In a few days there is separation and sloughing of the epithelium with the result that practically the entire nasal epithelium is destroyed. After this acute phase the remaining epithelium proliferates until the surface is renewed. It is possible that any immunity which may develop corresponds to the time necessary for complete proliferation of the epithelium following its sloughing. This is usually three or seven weeks and represents the average length of the immunity that is present in any individual after an attack of an upper respiratory infection.

The picture produced by upper respiratory infection in an infant differs somewhat from that of an older child. In the former there is more evidence of a constitutional reaction in the form of fever with prostration lasting one to three days with or without complication, whereas in the older child of 5 or 6 years the symptoms follow the pattern seen in adults with a change at various ages between the two age groups. In the younger age group there is likely to be a disturbance of the gastrointestinal tract in the form of anorexia and occasionally vomiting and diarrhea with the temperature rising to 102 to 104 F. After several attacks of such colds as the child grows older, there develops a familiar characteristic pattern of symptoms that are so routine in a given individual that a prediction may be made from day to day of the form and stage of the disease. The nasal discharge in the young infant may be responsible for his inability to eat in view of the fact that a baby has not learned to eat and breathe through its mouth at the same time.

Exudative pharyngitis and tonsillitis are more common than formerly and are frequently unrecognized because of the bizarre symptoms. While there may be early signs of nasopharyngitis of a few days' duration, the first symptoms noted usually are pain on swallowing and sore throat. Examination of the throat reveals a few lymphoid masses covered by a whitish to yellowish exudate located over the anterior pillars of the soft palate and occasionally on the tonsils. Some of these may be on the post-pharyngeal wall and be mistaken for lymphoid follicles. As the surface or top of these sloughs away, leaving an ulcer, there is an extensive increase in the amount of pain on swallowing. This will resemble aphthous stomatitis if the lesions are on the pillars and follicular tonsillitis when these structures are involved. The early lesions may resemble also those of trench mouth which progresses to full scale stomatitis.

Similarity of the appearance of the nasal mucosa in the early stages of a cold to that of allergic rhinitis is striking and is a basis for the contention that the cold may be only an allergic manifestation of some underlying difficulty. The role of allergy in the production of colds has been enhanced greatly by the apparent relief that comes about by the use of antihistaminic drugs. Many small infants and older children show considerable sensitivity to various foods, especially milk, and to inhalants. The dyspnea of spasmodic bronchitis and laryngotracheitis may be due to sensitivity to the bacterial or viral protein, with or without any other evidence of allergic manifestations in the family. Usually the pale, boggy appearance of the mucous membrane of the nose, the presence of eosinophilic cells in nasal secretions and the constant thin, aqueous discharge from the nose without progression to a purulent stage is indicative of allergy. A newborn infant may for the first twenty-four to forty-eight hours present incessant sneezing and some coryza as a result of temperature changes and the irritation from inspired air or from such material as dust from blankets or from the room.

Congenital syphilis in the early weeks of life may be mistaken for a cold. However, all that snuffles is not syphilis. Serologic evidence differentiates this condition from a cold. Aspiration of amniotic fluid or its presence in the nasal passage after birth may produce chemical rhinitis characterized by noisy breathing and relieved by removal of the tenacious, thick mucus by suction through a small catheter inserted in the nose.

The chief complications of the common cold and nasopharyngitis are otitis media and, formerly, its sequel, mastoiditis. The prevalence of otitis in the young infant is due to the short horizontal eustachian tube which permits infectious material to pass easily to the middle ear. Modern therapeutic measures have greatly reduced this complication. Cervical adenitis usually is associated with involvement of the pharynx and tonsillar areas. The persistence of such cervical nodes may be an indication of chronic bacterial infection in the tonsils. Viral infections in this region do not produce temporary or permanent hypertrophy of the tonsillar ring. Significant symptoms or complications of viral bronchitis or pneumonia are the persistence of a cough for a long period out of all proportion to the severity of the other clinical symptoms, and the presence of a mild temperature which may last for weeks. The latter may be due to a disturbance of the heat equilibrating apparatus even though all active infectious process has passed. Since a similar temperature curve may be evident when the infection is active, it is sometimes difficult to know when the children should be allowed full activity. Perhaps the use of the cold agglutinin test will be of some value in this respect. Prolonged or repeated infectious processes of the lower respiratory tract may be responsible for depletion of the child's nutritional status with retardation in his growth and development. The young infant with recurrent attacks of bronchitis or bronchopneumonia with coughing should be suspected of fibrocystic disease of the pancreas,

a condition more common than was formerly anticipated. The absence of trypsin in the stools, trypsin activity in material obtained by duodenal drainage, and an abnormal amino acid blood level curve are indications of this condition. Repeated trypsin assays of the stool may be necessary since in the early stages this enzyme may be present. An emphysematous chest with foci of consolidation throughout the lung fields characterizes the x-ray findings. Very often there is early atelectasis of the upper right lobe. Histoplasmosis with its more frequent recognition may resemble viral bronchitis or pneumonia. The radiologic evidence is much greater than the clinical findings seem to warrant, although the persistent cough and febrile reaction are indicative of a pneumonic process. Either the skin sensitization test or agglutination titer of the blood serum together with isolation of the parasite from the blood, bone marrow, or lymph glands is diagnostic of the condition. Tuberculosis does not produce many symptoms referable to the respiratory tract except in advanced secondary infections. This is particularly true of the primary complex. Positive tuberculin tests plus x-ray findings are sufficient to make a diagnosis. Enlargement of the tracheobronchial glands may result also from recurrent and prolonged infections of the tonsillar area with drainage along lymph channels into the aforementioned glands. Pressure on the recurrent laryngeal nerve accounts for the repeated attacks of pertussis-like coughing. The rapid response to x-ray therapy over the gland area and their complete disappearance following removal of the hypertrophied, injected tonsils confirms the diagnosis.

The aim of the treatment of any respiratory infection is to bring about recovery with a minimum of time and effort, prevention of secondary complications, and the prevention of a recurrence of the process. Much of the important emphasis placed on these infections in the past has come about as the result of an attempt to apply the antibiotics and sulfonamides in their treatment. The advent of any new therapeutic agent has brought a flurry of repeated effort to conquer these common infectious diseases. Most recently the antihistamines fall in this category. As stated earlier, it is very difficult to evaluate the efficacy of any particular therapeutic agent due to the variability and severity of infection on the one hand and the resistance of the host on the other. There is the temptation, since these powerful antibiotics and other drugs are available, to use them irrespective of any indication when diseases of the respiratory tract appear and to attribute any success in the treatment to the fact that the agent was being used when the infectious process disappeared. It is also well to emphasize that since these drugs are available and since they do produce such pronounced results in bacterial infections, there is a tendency to use them irrespective of indications. Later when no response occurs in a given case the severity of the infection is suspected of being greater than was anticipated. The child then is assumed to be much worse than he is and thus likely to be subjected to prolonged hospitalization with its expensive care and unnecessary abuse of the child. It may be a sad commentary on our diagnostic acumen and also on our ability to prognosticate correctly the outcome of some of these conditions that we become greatly excited and wish to do something more radical than warranted. This anxiety about therapeutic insecurity may arise because of the similarity of some of these respiratory conditions to more serious conditions such as poliomyelitis, diphtheria and meningitis. A stiff neck can be due to early cervical adenitis or to a lateral or retropharyngeal abscess which may be obscure for a period of several days or weeks, as well as due to meningeal irritation of meningitis, or poliomyelitis. All evidence of exudate in the tonsillar region is not diphtheria.

Too often in this day of specific drugs the physician is prone to overlook several of the important items of general treatment which aid materially in recovery from illness.[6] Some of this constitutes what is known as the "Art of Medicine," often a sadly neglected half of the "Art and Science of Medicine." No drug yet has been devised to replace the efficacy of the important item of rest. The child who has sufficient rest recovers more promptly and with fewer complications than the one allowed to be about at his discretion. Bed rest will require entertainment and patience in order to keep the child pacified; however, that should be the object of the parents' efforts throughout any illness. The amount of other forms of treatment should be so limited that the child will have the opportunity to rest. Hospital care offers little opportunity for rest to the sick child, in fact, the opposite is the case. The multiplicity of procedures (bathing, feeding, medicine giving, temperature taking) at inopportune times is devised to conform to an impractical nursing and hospital regimen. Eager house officers from the youngest to the oldest take turns at routine examination of the patient. All this makes it necessary for a child to be in fairly good physical condition to be able to withstand the impact of hospital care.

The use of barbiturates or paregoric may be necessary to aid in rest. These should be given in adequate doses at long intervals and suitably disguised in taste. Rectal administration may be necessary.

The temperature of the sick room should not be over 70 or 72 F. It is common practice to find the temperature much higher, with low humidity, resulting in further drying of the mucous membrances and further irritation of these parts. The upper part of the child's body should be covered. Especially is this true in infancy when, as usually is the case, the arms and shoulders are outside of the covers leaving approximately one-third or more of the child's body exposed. Infants and nursery wards in hospitals are prone to discard shirts and to leave this part of the body uncovered. Even if this does not produce further respiratory troubles, at least it looks more comfortable for the child to be dressed adequately.

The diet of a child with a respiratory infection does not differ from that of a child with any other form of non-enteric infectious disease. Mainly the child should be offered anything he desires that previously has been in his dietary. The danger comes from urging the child to eat something he does not want. Diet segregations as we find in hospitals are made for the convenience of the hospital and for the safety of adults who insist that they must eat in order to maintain their strength, whereas the child has no such idea. Recurrent colds in which an allergic reaction is suspected may be due to milk, especially if it has been necessary to alter its taste by addition of chocolate or other flavors. No effort should be made to increase the amount of this food in the child's diet. Suckers are a good way of administering a moderate amount of sugar which in turn stimulates water ingestion. The child should have an opportunity to take in as much liquid as he desires; however, urging to drink or eat more is likely to result in a decrease in the amount ingested. With so much emphasis on the importance of dehydration and its relationship to crystalluria in sulfonamide therapy, too much stress often is placed on water intake and too often in pediatric wards the child is subjected to intravenous or subcataneous infusion which only adds to his discomfort.

The temperature should be reduced by some antipyretic drug which may also have some analgesic effect. Probably the best drug for this purpose is aspirin given in dosages which do not exceed 1 grain per year per dose at four hour intervals when the temperature is above some arbitrary figure such as 102.5 F. With such a dosage there is no danger of salicylism. It is not uncommon in pediatric hospitals to find infants in the 6 to 12 month age group who have been receiving 5 grains of aspirin every four hours for one or more days. Too rapid and too extensive reduction of the temperature is as hard on the child's vasomotor system as the high temperature. With an exceedingly high temperature, sponging of the face and head with tepid water may be of some value; however, a cold bath is of little comfort to the sick child. Children with a tendency to febrile convulsions should have the temperature kept below the known "trigger" point. Parents should be instructed in this respect.

Since the symptoms of the common cold are localized in the nose, it is assumed that treatment of the cold can be brought about successfully by local application of some material to the nasal mucosa in the form of drops. There is no more likelihood of successfully treating a cold by the use of nose drops than of treating diphtheria by painting the involved areas of the throat. An aqueous solution of some form of astringent such as ¼ per cent neosynephrine, 1:10,000 adrenalin, or 1 per cent ephedrine is the only substance which should be used in the nose and this only to give relief in the case of a small infant who needs to have shrinking of the mucosa in order to promote feeding and of the older child to promote aeration of the sinuses in order to prevent sinusitis. The use of the antibiotics, sulfonamides, antihistamine, et cetera, in nose drops is to be deplored. Sufficient drops should be instilled in either side of the nose so that it may be carried far enough back to shrink enough of the mucosa to promote proper breathing. Too frequent use of nose drops will result in involvement of the lower respiratory tract. Under no circumstances should an oily preparation be used in the nose because of the danger of producing a lipoid pneumonia.

Nose drops may be of value also in relieving congestion around the orifices of the eustachian tube thereby relieving congestion of the tympanic membranes and permitting proper aeration of the middle ear.

The disturbing symptom of cough should be suppressed if it is so prolonged, hard and continuously irritating that it disturbs the child's rest. An explosive type of cough may force infection either into the middle ear or into the sinus areas. The cough should not be suppressed completely, otherwise there is improper

clearing of the purulent material from the bronchial tree. A mild sedative in the form of paregoric or codeine perhaps associated with some expectorant such as ipecac or ammonium chloride is about all that is necessary. Effort should be made to provide a cough syrup that is palatable so that the child will take it without much objection. Perhaps the art of medicine is applicable in the use of cough syrup by changing from one coloring substance or flavoring material to another while maintaining the same medicinal therapeutic agent throughout the various prescriptions.

While croup or acute spasmodic laryngitis may be a symptom, nevertheless, it is so important that it assumes a role of a disease. In this condition the laryngospasm may be relieved by external application of cold to the larynx together with inhalations of steam or water vapor for a period of fifteen to fifty minutes. Either steam or vapor is a most efficient expectorant. The use of ipecac in large doses will relieve the laryngospasm very quickly as soon as vomiting occurs. Large doses should be used since any excess is vomited. Influenzal laryngotracheitis resembles ordinary spasmodic laryngitis or croup; hence, it is important to consider every case of croup with great precaution due to this danger. This condition requires hospitalization, the use of specific antiserum, inhalations of aerosol penicillin and vaponefrin. Tracheotomy is an early and frequent emergency measure.

Every antibiotic has been used in an effort to cure and prevent various respiratory infections. The common cold and other viral infections do not respond to the sulfonamides. Yet, they are the most commonly prescribed drugs and are thought to be of value because many of the symptoms disappear while the drug is being used. However, they are of value in the elimination and probably the prevention of the bacterial complications of a cold, particularly in the case of influenzal and pneumococcic invasion. Sulfadiazine and sulfamerazine, either alone or in combination, are preferable, in a dosage of 1 to 1½ grains per pound per day given in divided doses at four hour intervals but preferably not during sleeping hours unless the child is awake. An adequate therapeutic result usually is obtained by the smaller amount of 1 grain per pound and the elimination of the large initial dose of one-half the daily dose. There is less danger of crystalluria and other untoward side-effects from this dosage. In those cases of severe infection in which an immediate high blood level is required, recourse must be made to the larger amounts of the drug. Fear of sensitization or intolerance to the drug by frequent administration in such mild infections as colds, laryngitis and bronchitis so that it cannot be used in some future severe infectious emergency should not deter the physician from its use. Surely the infant with cold, otitis media, meningitis or brain abscess is as great an emergency as ever will be met with; hence, he deserves the best therapy available. Beginning the drug in the second or third day of an upper respiratory infection and continuing its use for 2 or 3 days will produce the best results.

Penicillin may be used in most of the aforementioned conditions with equal efficacy by daily injections of 100,000 to 300,000 units. It is unfortunate that the painful method of administration tends to result in a feeling of antagonism against the doctor. While it has been reported that an adequate penicillin blood level can be obtained by oral administration,[7] the child is prone to rebel at swallowing the medication, or, this method may result in nausea and vomiting. Follicular and parenchymatous tonsillitis respond more quickly to penicillin than to the sulfonamide. Viral exudative tonsillitis and pharyngitis are favorably influenced by aureomycin in one to three days. Sulfonamides or penicillin, or both, are used in pneumonias. Whenever pneumonia is suspected, the drug that is first administered is one of the sulfonamides. The persistence of the consolidation and other pneumonic signs after three or four days is sufficient in the physician's mind to warrant a diagnosis of viral pneumonia and the use of other antibiotics such as aureomycin, chloromycetin and, at the present time, terramycin. These should be given in dosages of 50 mg./kg. divided into 4 or 6 hourly doses and given throughout the day. Lack of improvement should warrant further radiologic examination of the chest to determine the presence of a viral pneumonia, histoplasmosis, some tuberculous lesion, or other pathology. In young children these drugs should be disguised by pleasant tasting elixirs or chocolate.

Recent use of the antihistaminic drugs in the treatment of the common cold and a few other of the respiratory infections has become quite popular and extensive. This is on the basis of the similarity of the early symptoms of a cold to those of an allergic rhinitis and to that fact many observers have seen and experienced clinically what appears to be a phenomenal response to the use of these drugs. The use of pyribenzamine, neohetramine, to mention but a few, in the first few hours or days of a cold may be

of some value. Yet, Feller[8] and others noted no beneficial or prophlactic effect from them when used in patients with artificially produced colds. Although the literature is beginning to contain some reports of adverse reactions following the use of these drugs, they will continue to be a common form of self-medication by the laity, also by physicians, in an effort to do something for an otherwise incurable condition.

Various factors involved in the production of chronic and recurrent respiratory infections have been mentioned. Treatment of the individual exacerbation of a recurrent type of infection differs but little from that of the primary one. Hence, all efforts should be devoted to the prevention of recurrence. These children require a very careful history and a most thorough physical examination and evaluation. Provision for adequate rest is imperative in any regimen for this condition, and can be done only by maintaining the child in the positive energy balance. This is brought about either by increasing the intake or decreasing the output of energy. Since it is almost impossible to increase the amount of food intake in an otherwise normal child, it is necessary, therefore, to reduce the expenditure of energy. It will require much effort on the part of the physician and the parent to bring this about. It may mean reduction in all types of activity such as schooling, music lessons, dancing lessons, parties, movies and, more recently, television and, finally, the emotional stimulation that comes in families from the desire of the parents and the school for the child to exceed beyond his ability and potentiality. There must be adequate rest at night and in some instances even in the afternoon.

All evident foci of infection, such as sinusitis, infected tonsils and adenoids with malformations of the nasopharyngeal tract and infected atelectatic and bronchiectatic lung areas should be eliminated. This leads many times to the routine or promiscuous removal of tonsils and adenoids on the single criterion of being tangible and removable. In no instance should they be removed until repeated observation by the physician has indicated their involvement in the respiratory infection. This evidence may be apparent only in the early stages of the process. Obvious obstruction of the airways by these structures is sufficient to warrant their removal. Age offers little contra-indication to this procedure since adenoids may be removed at a few weeks and tonsils at one year if necessary. The time of year makes little or no difference. Delay until some arbitrary age such as 4 to 7 years may mean a permanent handicap in health or a retardation in growth and development due to the continuing infection.

Underlying allergic difficulties should be recognized and an attempt made to correct them either by elimination of offending substances or by proper desensitization methods. Vaccines (subcutaneous or oral) probably are of no value in the prevention of recurrent respiratory infections although their use is still widely in vogue. Influenzal vaccine may be of some value in the prevention of infections due to influenzal A virus. Since this usually occurs in epidemic form at infrequent intervals and since the immunity from it is of short duration, its value is questionable unless it is given in the course of a known and recognized epidemic. Vitamins should be given in amounts consistent with the production of good nutrition.[9] This would indicate 100 mg. of ascorbic acid in addition to that contained in food. The earlier supposed anti-infectious property of vitamin A has popularized its use in colds. Excessive amounts should be used with caution since there have been reports of toxic reactions to it. Large doses of vitamin B complex or any of its components are unwarranted. Correction of iron deficiencies is indicated. The B complex likewise may be of value in enhancing the general health of the child, but prolonged administration in large amounts is unwarranted. Adequate amounts of iron should be incorporated in the diet provided there is a decrease in the hemoglobin content of the blood. It is possible that periodic administrations of sulfonamide or other antibiotics for a period of two or three days at intervals of two to six weeks so as to anticipate by a few days the recurring respiratory infection, may be of some value in the prevention. This is based on the assumption that there may be some symbiotic relationship between the secondary bacterial invader and the virus producing the original infection.

SUMMARY

An effort has been made to evaluate and classify the etiology of the common respiratory infections in a tangible form. Emphasis has been placed on the role of overstimulation in the cause and the correction of these conditions. The use of the various drugs and other antibiotics in the treatment of these infections has been stressed together with their advantages and shortcomings. As yet, no specific therapy either for the treatment or prevention of these processes has been evolved. Continued clinical

observation of much detailed research will be necessary before the problem is solved.

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CHRONIC ILLNESS

Until recent years the physicians' time was taken up largely by those who were acutely or critically ill, but more recently the emphasis is shifting towards those who are chronically ill. Chronic illness, of course, affects those in the older age brackets because many of the chronic illnesses are a result of degenerative processes.

We must remember, however, that so-called chronic illness affects many people in the younger age groups, realizing that a list of the most important chronic diseases should include tuberculosis, diabetes, kidney disease, cancer, asthma, heart disease, arthritis, arteriosclerosis, high blood pressure and nervous and mental diseases.—Alfred Ellison, M. D., in J. Indiana St. Med. Assn.

A DISEASE OF ADAPTATION

The recent work of Selye on the general adaptation syndrome and the diseases of adaptation is too well known to warrant repetition here. As a result of my studies in gout, plus my reading of Dr. Selye's monumental work, it is my impression that gout represents one of the diseases of adaptation.

We are all aware of the obvious factors which play contributory roles in the etiology of gout, such as trauma, emotional disturbances, infection, weather changes and dietary indiscretions. My own studies lead me to believe that allergy, at least in many instances, also plays a contributory role, and furthermore, that the hereditary tendency in gout may well be due to the inheritance of allergy rather than the inheritance of a disturbed purine metabolism.—Fritz Bramigk, M. D., in J. Michigan St. Med. Soc.

THE ECONOMIC NEED FOR AN ADEQUATE PUBLIC HEALTH PROGRAM IN WEST VIRGINIA

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One of the more pressing problems to be faced today is the enormous increase in the cost of government services. This is of interest to everyone and we are justified in asking, "Is this necessary?" On the other hand, one should determine whether or not the service is run efficiently, also how it can become more efficient. The possibilities of increasing efficiency and receiving a larger return on an investment, by spending a little more money, should be studied.

Public health is one of the many government services which is adding to the cost. It is our intent to show that money spent for this purpose in West Virginia is justified. It will be shown also that a reasonable increase in funds used for prevention will result in a great saving. Economic loss due to illness and death, cost of hospitalization and loss of life can be reduced materially by a more adequate preventive program.

One does not place a monetary value on human beings, yet society has a considerable investment in each of its members, and the members in turn represent a potential of wealth from which society has a right to expect ultimate benefit. Thus, the loss of an individual before the investment has been repaid represents a real economic loss to the family and to the community.

Dublin and Lotka,[1] also Hanlon,[2] have estimated that the cost to society of a child at birth (for the family with an annual income of $2,500) is $800. The cost of the child at age 18 has amounted to about $18,000. From then on the potential earning capacity is estimated at about $50,000. Using these figures, Hanlon estimated the value of persons in each age group up to 45 years of age. With these values as a basis we can roughly estimate the cost of any cause of death for a given number of persons. In table 1, the deaths from certain preventable diseases with their costs (in thousands of dollars) to the State of West Virginia are listed.

That the number of deaths from these causes can be materially reduced has been demonstrated in areas in this country. We have, at our disposal, means of completely eliminating diphtheria, measles, whooping cough, scarlet fever, tuberculosis, diarrhea and enteritis, and syphilis. Deaths from accidental causes and prematurity can be reduced by 95 per cent and 70 per cent respectively by application of our present knowledge.

As shown in the table, the economic loss from the seven causes of death listed amounted to over $18,000,000, in 1949. No attempt has been made in this tabulation to show the cost of the illness in terms of hospital and medical care for the fatal cases.

In addition to the money lost because of the deaths from these causes, we have also to pay for the hospitalization and treatment of non-fatal cases of these diseases. In tuberculosis alone the expense to the state is enormous. Added to this is the care of the families and the loss of earning power of the patient. The total of these costs has been estimated at around $4,000 per case per year*. At the present time there are about 4,000 persons in West Virginia known to have active tuberculosis. Thus, in addition to the lives lost, this one disease is costing the state $16,000,000 per year. The hospitalization of tuberculosis patients alone is quite an item. The cost per patient per day at present is $3.50 or $1,277.50 per year. There are 1,067 beds (with very few vacant at any time) or a total of $1,362,317 per year. Yet tuberculosis is preventable.

The cost of hospitalization of tuberculosis patients could be reduced materially in a very few years by an adequate, vigorous control program. It has been estimated that the period of hospitalization of the minimal case is about one-half that of the moderately advanced case and a great deal less than that of the far advanced. Consesequently, if all persons with tuberculosis could be hospitalized while in the early stages of the disease the time of hospitalization could be reduced, resulting in a considerable saving. In the case finding program in 1949 there were 2,500 new cases reported. Of these 89 per cent were in the minimal stage. However, of the 1,049 admissions to sanatoria in the same year 80 per cent were far advanced. This indicates a breakdown in the control program between the finding and hospitalization of the case which probably is due to inadequate follow-up and educational procedures which, in turn, reflect a lack of essential public health personnel. With an adequate number of public health nurses and health educators a better job could be done in getting the early cases hospitalized.

The other diseases listed in table 1 also are quite costly to society, in addition to the loss of life. However, the cost of illness due to these is not as readily available as is the cost of tuber-

*Statistics through the courtesy of Mr. Albert Rhudy, Acting Director, Bureau of Tuberculosis Control.

TABLE 1

NUMBER OF DEATHS BY CERTAIN CAUSES: BY AGE AND THEIR ESTIMATED VALUE IN THOUSANDS OF DOLLARS

West Virginia, 1949

App. Mid Value Lives in Age Group	1500	4500	11000	18000	22000	21000	15000	Total
Age Groups	(under) 5	5-9	10-14	15-19	20-24	25-34	35-44	
Premature Deaths (800.@)*	477							477
App. Value	380.							380.
Diarrhea and Enteritis Deaths	258							258
App. Value	385.							385.
Diphtheria Deaths	7	3						10
App. Value	11.	13.5						24.5
Measles, SF, WC Deaths	46	1		1		1		49
App. Value	69.	4.5		18.		21.		112.5
Tuberculosis Deaths	20	2	2	12	46	89	102	273
App. Value	30.	9.	22.	216.	1010.	1854.	1570.	4711.
Syphilis Deaths	7				2	4	22	35
Est. Value	11.				44.	84.	303.	442.
Accident Deaths	128	52	45	77	139	214	174	829
Est. Value	129.	234.	496.	1380.	3060.	4510.	2620.	12492.
Total	943	58	47	90	187	308	298	1931
	1078.	261.	518.	1614.	4114.	6469.	4493.	18,547,000

*Since these infants died within a month their cost is stated at $800. rather than $1,500.

culosis. It is felt, though, that many more millions of dollars are spent on them than the state can afford.

In some areas in this country, experience has shown that great savings may be made when an adequate preventive program is instituted. Several examples of this are cited by Hanlon.[3] In New York City, in 1920, there were 14,000 cases of diphtheria. The expense of hospitalization and treatment of these cases totaled over a million dollars. During 1929-30-31 an intensive immunization program was instituted at a cost of $375,000, and continued thereafter at a cost of $10,000 per year. During 1939 there were only 543 cases. The cost of caring for these plus the total cost of the 10-year immunization program was $493,875, or half the cost of the disease alone in 1920.

While Vaughn was Commissioner of Health of Detroit, he submitted a request to the city for an extra $200,000 per year for five years for early tuberculosis finding and hospitalization. At the time of the initiation of the program 15 per cent of the new cases found were in the minimal stage, 30 per cent were moderately advanced and 55 per cent far advanced. As a result of the program, in 1943, 54 per cent of those found were minimal and 17 per cent far advanced. In Detroit the average time of hospitalization of a minimal case is nine months while that of a far advanced case is two years or more. As a result of the expenditure of $200,000 for this program it was estimated that the saving to the city was about $1,400,000 per year.

Private enterprise recognizes the value of prevention. Between 1911 and 1925 the Metropolitan Life Insurance Company spent over $20,000,000 for health education, early diagnosis and nursing services among its policy-holders. During this period of time the death rate among its policy-holders declined over 30 per cent or twice the reduction among the general population. The expenditure of $20,000,000 resulted in a saving of $43,000,000 over the 17 years.

In West Virginia, thanks to the increased appropriation made by the 1949 Legislature and the local governing bodies, plus federal grants in aid, a total of $2.5 million has been available for the preventive medicine program. Yet it is apparent that this amount is inadequate when we compare the West Virginia death rates from certain preventable causes with those of the United States.

The infant death rate for West Virginia in 1948 was 40.2 per 1,000 live births and the neonatal death rate was 25.9 per 1,000 live births as compared to 32.0 and 22.2 for the Nation.

Deaths due to prematurity in 1949 were 24.2 per 100,000 population and those due to diarrhea and enteritis were 15.1 per 100,000 population. These two causes are not among the ten leading causes of death in the United States, but rank 7th and 10th in West Virginia. The rate from tuberculosis is also slightly above the national average (27.0 compared to 26.5 per 100,000).

The health department personnel is quite inadequate throughout the state. A comparison of personnel and appropriation in West Virginia and the recommended minimum[4] by the American Public Health Association is made in table 2.

At the present time (November, 1950) there are only 13 full time local health officers in the state. The remainder of the counties and districts are served by part time physicians who carry on this work to the detriment of their private practice. According to the recommended minimum there should be 40 full time men in the state, working in the counties.* Four times the present number of public health nurses are needed. Almost twice the present complement of sanitarians are needed to carry out a mini-

*It is felt that 22 full time health officers, with adequate part time men to conduct clinics, would render the minimum service to West Virginia.

TABLE 2

COMPARISON OF HEALTH DEPARTMENT PERSONNEL AND APPROPRIATION IN WEST VIRGINIA AND THE MINIMUM RECOMMENDED BY THE AMERICAN PUBLIC HEALTH ASSOCIATION

Personnel	West Virginia	Minimum Recommended
Health Officer (full time)	1 per 153,000	1 per 50,000
Public Health Nurse	1 per 18,000	1 per 5,000
Sanitarian	1 per 25,000	1 per 15,000
Health Educator	1 per 500,000	1 per 50,000
Appropriation for local use	$ .63	$1.50

mum program. Health educators, as such, are virtually unknown, with only four in the state.

With such a shortage of personnel it is surprising that there has been as much progress made as is shown.

A request has been made to the 1951-52 Legislature for funds sufficient to make the total local appropriation for public health $1.00 per capita. While this still does not approach the minimum recommended, it is about all that could be efficiently utilized at the present. This amount would allow for services in counties in which there is no public health program, and for extensions in areas in which there are at present far too few workers. While the economic effect of this expanded program would not be felt at once, with a gradually increasing appropriation and more effective work being done, the returns on the investment would be noticable inside the next decade.

SUMMARY AND CONCLUSIONS

It has been shown that:

1. Governmental services, such as public health, should be studied in the light of potential savings by means of increased expenditures (properly utilized).

2. West Virginia is losing millions of dollars annually through the untimely death of many of its citizens due to preventable diseases. Judicious increases in public funds utilized to prevent disease will pay rich dividends.

3. Tuberculosis is preventable, but this disease alone is costing the state over $16,000,000 in economic loss each year. Hospitalization of persons with this disease costs over a million dollars per year.

4. The present public health program in the state falls far short of the minimum recommended.

In conclusion, needless disease and death due to preventable disease in West Virginia represent an enormous economic loss to the state as well as a loss of valuable lives. A more adequate public health program, costing only a fraction of what is being spent now to support the tuberculosis organism could save many lives and many millions of dollars in the next ten years.

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THE SIGNIFICANCE OF ASCITES*

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It has been our experience that the patient with the large abdomen presents three problems: (1 Is it fluid or is it fat? (2) Is the fluid free or encapsulated? (3) What is the basic disease? The purpose of this paper is to review these questions.

As a student I somehow got the idea that determining the presence or absence of ascites was a simple matter. Relying on our old friends "shifting dullness" and the "fluid wave" I continued in my ignorance until the winter of 1929 when, as a house officer under Dr. W. L. Palmer in Chicago, I was confronted by a middle-aged man with enlarged cervical glands and evidence of pleural effusion. The patient felt that his abdomen was unusually full but I considered it normal. Doctor Palmer, however, using the standard procedures, was uncertain, but to him the "feel" of the abdomen, a physical sign difficult of description and not useful to all of us, indicated that free fluid was present. Accordingly, the patient was submitted to the acid test, namely, paracentesis, and several hundred cc. of beer-like fluid were obtained with ease. This experience left me uneasy and the feeling has persisted. Again, in the fall of 1948. twenty years later, we saw a very well preserved gentleman of 80 at the Medical College of Virginia complaining of weakness and an enlarging abdomen. He was examined by several clinicians including myself and a fluid wave and shifting dullness were demonstrated to the satisfaction of all. Accordingly he was referred to the hospital for study. The resident staff noted the large abdomen but were skeptical of the presence of fluid. This patient likewise was subjected to aspiration and no fluid was obtained. I have been watching this gentleman now for over a year, waiting for him to deteriorate generally and for his abdomen to burst but he has remained perfectly well.

Such experiences have left me feeling that the diagnosis of ascites is often a difficult one and frequently can be established only by aspiration.

Occasionally one can be reasonably sure that there is fluid in the abdomen but uncertain as to whether it is free or encapsulated. This problem most often arises in young women; here we must also consider the possibility of pregnancy.

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Some years ago Dr. Stuart McGuire asked me to check over a 22 year old single girl who obviously was 6 to 7 months pregnant but would not admit exposure. There was no history of enlargement beginning chiefly in one lower quadrant, which is said to be a helpful observation in the diagnosis of ovarian cyst. Examination showed a greatly distended abdomen with suggestion of fluid wave but no shifting dullness. No parts could be felt. Somehow I became more and more convinced that she was pregnant and cross-questioned her so vigorously that she soon realized by suspicions, which were somewhat offset by a small vaginal opening and the absence of pregnancy changes in the vagina and cervix. Doctor McGuire removed a tremendous ovarian cyst full of fluid.

Before discussing the clinical aspects of ascites we may profitably review the present ideas of the pathologic physiology which brings it about.[1] Under normal circumstances the constant exchange of fluid between the vessels and tissues is thought to occur by the following mechanism: the capillaries are relatively impermeable to protein; at the arteriolar end of the capillary the intravascular pressure is higher than that in the tissues and greater than the holding power of the proteins in the capillary so that fluid is forced into the tissues; on the contrary, at the venular end the intravascular hydrostatic pressure has been dissipated and the drawing power of the (by now) concentrated proteins brings fluid from the tissues into the capillary; a certain amount of tissue fluid is drained off by way of the lymphatics.

Considering these relationships abnormal amounts of fluid can accumulate in the tissues or body cavities as follows:

(1) If the intracapillary pressure is raised so that it approximates or exceeds the drawing power of the intravascular proteins.

(2) When the proteins are so depleted that they cannot exert this drawing power. This especially applies to serum albumin.

(3) If the capillary walls are disturbed so that they allow more fluid to escape.

(4) When the lymphatic drainage is obstructed.

(5) In the presence of some combination of these changes.

Of these possibilities those usually responsible for clinical edema appear to be venous or lymphatic obstruction and depletion of the proteins, with obstruction much the more important. In such circumstances the fluid is a transudate, is of relatively low specific gravity, poor in protein, and has few cells.

A second large group of cases in which excess fluid accumulates in the tissues or body cavities is of that type in which there is local irritation such as results from inflammatory or malignant disease of the part. At the beginning of the irritation[2] the vessels appear to constrict. Marked dilatation of the arterioles and then the venules soon follows, with increased flow of blood in the area; in turn the capillaries dilate and the flow of blood slows. Fluid and cells escape into the tissues or cavities, the former resembling plasma and the latter being of varying types depending on the irritating or inflaming agent. Such fluid is an exudate. It has a relatively high specific gravity, is rich in protein, and contains numerous cells.

Thirdly, certain cases are seen in which none of the above mechanism seem to be operating, and we may have massive accumulations of fluid for no apparent reason. Such fluid may have the characteristics of either an exudate or a transudate and, on occasion, may even be bloody.

We believe that all cases of ascites should be approached from these three points of view, namely, is it due to some circulatory disturbance resulting in a transudate? is it associated with pathology of the peritoneum itself with the formation of an exudate? or is there some disease in which it forms for reasons unknown? In this connection we believe also that fluid removed from body cavities should always be examined in routine fashion to include:

1. Specific gravity.
2. Quantitative protein determination.
3. Cell count and differential.
4. Study of the cells for malignant or other significant changes.
5. Bacteriologic study to include smears, cultures and animal inoculations.

Recent investigations indicate that additional chemical study such as that for lactic acid and glucuronidase may prove helpful in the future[3].

Let us return to clinical problems. Confronted with a patient whose abdomen obviously or probably harbors free fluid and, viewing the situation from the transudate-exudate-unknown angle, we usually think first of disease of the liver, heart or kidneys, and inflammatory or malignant disease of the peritoneum itself. To distinguish between these we call on our customary aids of history, physical examination and laboratory study.

If our investigation leads to no idea of abnormality above the diaphragm, no history suggesting cardiac failure, no neck vein distention, dry lungs (recalling that some cirrhotics and cases of Meigs'[4] syndrome have pleural effusion), and a normal heart we may narrow our search to the kidney and abdominal and pelvic organs. Diagnosis of kidney disease usually is easily arrived at by study of the urine and by other familiar tests. To diagnose liver disease we have the physical examination and the various function tests so comprehensively discussed by Dr. Caravati this morning. Pelvic and rectal examinations should never be omitted and are best done after removal of the fluid as is abdominal palpation. X-ray study of the gastrointestinal tract should be carried out even though the diagnosis may seem obvious without it. The ascitic fluid should be examined as previously outlined.

In obscure cases one may make use of needle biopsy of the liver, peritoneoscopy and, finally, exploratory laparotomy.

From clinical and laboratory studies we usually feel reasonably well satisfied with our diagnosis as to the fundamental disease in patients with ascites. Generally we find them to have cirrhosis of the liver or metastatic cancer of the peritoneum from ovary or gastro-intestinal tract. Cardiac failure secondary to such conditions as adhesive pericarditis is an occasional cause. At times primary kidney disease, such as the nephrotic stage of chronic glomerulonephritis, is responsible. Tuberculous peritonitis which so often arose in this connection twenty years ago seems to be diminishing in frequency. Thus in 1937-38-39 this diagnosis was made with certainty in the Medical College of Virginia Hospitals in eleven cases and with great probability in seven more, whereas in 1947-48-49 it was positively made in only four cases and existed in all probability in five more. In the year 1949 only two such diagnoses were made. This seems especially significant in light of the fact that during the first three year period, i. e., 1937-40, there were 31,177 hospital admissions, whereas during the latter, i. e., 1947-49, 59,631 patients entered the hospitals.

The following case illustrates a number of problems.

Case 1—A. D., a 38 year old colored female, was admitted to the hospital on February 16, 1950, complaining of abdominal distention.

About six weeks before admission she noticed that her abdomen felt unusually full. This continued and the whole abdomen seemed to be enlarging. Several weeks later she began to suffer intermittent sharp pain in the right lower quadrant. At times she was nauseated but there was no vomiting. Eating aggravated the right lower quadrant pain and this was also more noticeable or more likely to occur when her bowels moved. The bowel movements had not changed in occurrence or character.

Gradually these difficulties grew worse and she felt somewhat weak. She did not think she had lost any weight.

For many years she had suffered with dysmenorrhea and had taken many medicines for this. Her periods had always been regular and lasted four or five days until five months before admission when her period came at the expected time but lasted several days longer than usual. During the next two months she had no regular period but noted occasional spotting when she went to the bathroom. This did not require a pad. Two months before admission she had a seemingly normal period associated with unusually severe cramping pain. Thereafter she again noted irregular small amounts of bleeding not requiring a pad, but had no further regular periods.

The history was not otherwise significant. There was no known tuberculous contact and the patient only rarely drank alcohol.

Examination showed a young-looking colored woman in no distress. Temperature 100 F. Pulse 104. Respiration 20. Blood pressure 140/80. The head and neck were normal. There was no distention of the neck veins. The lungs and heart were normal except that both diaphragms seemed somewhat high. The abdomen was generally distended. There was dullness in the flanks, which shifted with change in position. A fluid wave was present. The liver, spleen and kidneys were not felt. There were no masses or hernias; there was no tenderness. Pelvic examination was somewhat unsatisfactory because of abdominal distention. The cervix was normal. The corpus was thought to be enlarged. The adnexae seemed clear. On rectal examination a walnut-sized mass was felt posterior to the cervix. This was firm, fixed and nontender. There was no blood on the glove. The mass was not thought to be in the rectum.

Another examiner thought that the uterus contained fibroids and that both adnexae were markedly indurated, probably secondary to an inflammatory process.

The urine was normal, the hemoglobin 11 grams, the RBC 4,000,000 and the WBC 6,000, with 78 polymorphonuclear, 18 lymphocytes and 4 mononuclear. The blood smear was normal.

The serologic test for syphilis was negative and the bleeding and clotting times were normal. The NPN was 35, sugar 110, and blood proteins 6.51 with albumin 3.27 and globulin 3.24. The prothrombin time was 18 seconds and control 14 seconds, with concentration 43 per cent.

X-ray examination of the chest was normal except for a small transverse linear shadow above the right diaphragm, which itself appeared somewhat elevated. Both costophrenic angles were blunt. Flat and upright films of the abdomen were negative. No fetal shadow was seen. Intravenous pyelograms and a barium enema were normal.

Course: During the first four or five days there was little change. The patient seemed to be in no great distress. Her temperature ranged from normal to 100.4 F. irregularly. On the fifth hospital day aspiration of the abdomen yielded 5000 cc. of straw colored fluid which showed a specific gravity of 1.022, protein 6.5 Gm. per hundred cc., and 330 cells with 73 lymphocytes, 21 polymorphonuclear, and 6 endothelial cells. No cancer cells were seen. Smears and cultures were negative. Special cultures for acid fast bacilli were set up.

Following aspiration the liver and spleen again could not be felt. There was no mass or tenderness. On pelvic examination the corpus could now be felt and was thought to be 2½ times normal size, irregular and firm. The right adnexal region contained several walnut-sized hard nodules, possibly attached to the body of the uterus. The left fornix was clear. By rectum an irregular, hard, nontender mass could be felt in the right cul-de-sac.

The next day the blood proteins were 6.47, with albumin 2.66 and globulin 4.21. The bromsulphalein liver function test showed 6.1% retention; the thymol turbidity was 3 units; the cephalin cholesterol flocculation was 2+. The phenolsulfonephthalein kidney function test showed 85 per cent excretion in two hours.

The foregoing findings suggested either tuberculous salpingitis and peritonitis, or pelvic tumor. It was felt that the patient should be explored. This was done on the ninth hospital day. The omentum was found to be markedly thickened and diffusely studded with pea-sized firm, yellowish nodules, as was the peritoneum generally. There were several nodules on the inferior surface of the right lobe of the liver. The body of the uterus was normal. In the right adnexal region there was a lemon-sized cystic mass which was adherent to the body of the uterus and the right pelvic wall. The right tube was enclosed in this mass. The process was thought to represent carcinomatosis, probably primary in the right ovary. After suitable specimens were taken for biopsy purposes, the abdomen was closed. Microscopic sections of the omentum and nodules showed papillary adenocarcinoma, rapidly growing.

Following operation the patient received x-ray treatment over the abdomen. She has pursued a gradual downhill course with symptoms of chronic obstruction.

Having discussed briefly the more common conditions associated with exudative and transudative ascitic fluid, let us close with an unusual case. In 1937 Meigs and Cass[4] described seven cases in which there was pleural effusion and fibroma of the ovary, and in which the fluid disappeared and the patient regained normal health following removal of the tumor. Since then many different ovarian tumors have been found associated with this peculiar fluid accumulation, which may be in the thorax, in the abdomen, or in both. There is no known explanation for the formation of such fluid.

*Case 2.**—K. W. M., a 55 year old colored woman, entered the hospital in September 1945, complaining of swelling of the abdomen and shortness of breath. About four months before admission she had noted painless swelling of the abdomen which gradually increased. Later she began to be short of breath and was particularly uncomfortable lying down. Several weeks before admission she noted slight swelling of the feet and ankles. As her abdomen enlarged she seemed to be losing flesh elsewhere.

Examination showed a small, chronically ill female sitting on the side of the bed in mild respiratory distress. Her weight was 113 lbs. The heart and lungs were normal. The abdomen was greatly distened with fluid. There was slight pitting over the shins.

The hemoglobin was 78, RBC 5,040,000, WBC 13,900, with 82 per cent polymorphonuclear. The urine was normal except for a trace of albumin. The blood porteins were 5.5 Gm. per hundred cc., with 2.7 albumin and 2.8 globulin. The serologic test for syphilis were repeatedly positive. X-ray of the chest showed a linear transverse shadow at the right base compatible with lung infiltration or collapse; the right costophrenic angle was obliterated.

Subsequent Course: Abdominal aspiration yielded 15,000 cc. of clear, yellow fluid with a

*This case will be described in more detail in a paper entitled "Pelvic Tumors with Ascites, Hydrothorax, or Both (Meigs' Syndrome)" to be published elsewhere.

specific gravity of 1.026 and 200 cells per c. mm. (type of cells not determined). This fluid contained albumin (four plus). No organisms were demonstrated on smear or culture. No tumor cells were found.

Following aspiration a hard, irregular, movable, slightly tender mass about the size of a baby's head was felt in the lower midabdomen. This mass had five "lobes" and seemed to be attached in the pelvis. On pelvic examination a large, hard, irregular mass was felt posterior to the cervix.

The fluid rapidly reaccumulated and during the ensuing week, three further tappings yielded abundant similar fluid with a specific gravity on one occasion of 1.017.

The patient was considered to have a milignant tumor of the ovary with peritoneal and possibly pleural or pulmonary metastases, and was discharged to the outpatient department for symptomatic treatment and aspiration.

During the next eighteen months, from October 1945, to March 1947, aspiration was done approximately every thirty days. The lower abdominal mass did not change perceptibly. The liver edge could be felt 3 to 4 fingerbreadths below the right costal margin. It was smooth and nontender. On one occasion fluoroscopy of the chest showed a semilunar density obscuring the right diaphragm. By the latter date, i. e., March 1947, the patient's condition had become pitiful in the extreme. She had lost an additional 30 pounds and resembled a skeleton with a large abdomen. At home she was miserable save for short periods immediately following aspiration. Getting to the clinic involved an almost overwhelming effort.

On March 14 she was readmitted for the insertion of a Crosby[5] button with the hope that the repeated tapping might be stopped, at least for a time. She was seen by Dr. Herbert C. Lee, who felt that no definite diagnosis had been made, that Meigs' syndrome was certainly a possibility, and that she should be explored. This was done on April 8, 1947, and a large nodular, cystic and semisolid mass was found arising from the left ovary. The uterus contained numerous fibroids ranging up to 4 cm. in diameter. The peritoneum and liver were normal. Appendectomy, hysterectomy and bilateral salpingo-oophorectomy with removal of the tumor, were done. Pathologically the tumor was a teratoma.

It is difficult to convey to you this patient's remarkable postoperative improvement. Almost immediately she began to feel better and developed a ravenous appetite. The ascites did not recur. Three months later she seemed entirely well and had gained 25 pounds. The liver edge was still palpable.

Since that time, a period of three years, she has continued to be perfectly well.

In summary, this woman was misdiagnosed as ovarian cancer with peritoneal metastases for many months. As a result she was put through a great deal of unnecessary suffering. At long last the possibility of Meigs' syndrome was realized and she has been restored to normal health.

CONCLUSIONS

The demonstration of free fluid in the abdomen should lead our minds at once to three basic conditions:

1. Disease elsewhere resulting in abnormal circulation in the peritoneum.
2. Disease of the peritoneum itself, either primary or secondary.
3. Unusual and obscure conditions, notably Meigs' syndrome in cases in which there is no acceptable explanation for the fluid formation.

However obvious the fundamental disease may seem, every case should be thoroughly studied with these possibilities in mind. By so doing one may occasionally effect a miraculous "cure".

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OUR ALLIED PROFESSIONS

Our allied professions are affected by the same problems that beset us. The Dentists, the Nurse, the Pharmacist, the Veterinarian and the Minister are all our steadfast friends—our affairs intimately concern them and theirs concern us. Let us draw closer together individually and as organizations to better provide improved health to all our people. United let us stand—divided, we may yet, in the long run, fall.—Sam A. Overstreet, M. D., in J. Kentucky St. Med. Assn.

THE ENDAURAL OPERATION FOR CHRONIC MASTOIDITIS*

By J. MORRISSET SMITH, M. D.,
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Perhaps the proper title for this article should be the Endaural Approach for Operation in Chronic Mastoiditis, with the Indications and the Operation of Election in the Individual Case.

Since the beginning of the one stage fenestration operation for deafness approximately eleven years ago, there has been a great deal of discussion regarding the merits of the postauricular and endaural incisions.

For a period of twenty-five years before the fenestration began, the writer performed a very large number of mastoid operations at the New York Eye and Ear Infirmary, all by the postauricular route with entirely satisfactory results. During the last ten years, more than seven hundred fenestrations have been done by the endaural route with entire satisfaction. Either approach will give an adequate exposure of the mastoid cortex and middle ear. The method of choice is the one best suited to the individual operator.

Plate No. 1. Right Mastoid. The facial ridge has been lowered to the annulus tympanicus showing the short process of the incus and the drum membrane in their normal position.

My personal preference is the endaural approach in this work because of the external membranous opening is enlarged when the incisions are made and the bleeding is much easier to control than it is when the flap is cut following a postauricular incision.

For a simple mastoid, the postauricular incision is the choice, in my opinion, because the entire cellular contents of the mastoid can be exenterated, the upper three quarters of the wound closed, including the periosteum, and a small cigaret to drain inserted in the antrum. This allows the infection in the soft tissues to become sterile. The drain is removed in three or four days. The mastoid quickly heals with little or no postauricular deformity. The middle ear becomes dry in a day or two, and the canal is firmly packed for about four days to prevent stenosis of the membranous canal.

The technique of the endaural approach quoted from Lempert's description is as follows: "Three endaural incisions are made. The first begins in the membranous lining of the superoposterior wall of the external auditory canal at the junction of its osseous and membranous portions. The incision is carried downward and outward along the entire membranous portion of the posterior canal wall until the lower end of the anterior border of the concha is reached.

"The second incision begins at the point of commencement of the first incision in the superoposterior wall of the canal and is carried along and through the membranous lining of the outer third of the superoposterior wall and continued upward adjacent to the tragus into and along the anterior wall of the antauricular suprameatal membranous triangle through the skin, the

Plate No. 2. The Right Mastoid with the complete dissection and removal of the drum membrane, showing the malleus, incus, and stapes in their normal positions in the middle ear.

*Presented before the 83rd Annual Meeting of the West Virginia State Medical Association at White Sulphur Springs, July 28, 1950.

fibrous tissue and the periosteum up to the apex of the triangle.

"The third incision which connects the first two incisions along the anterior border of the concha begins from the outer end of the first incision at the lower end of the anterior border of the concha, is carried upward through the skin, the fibrous tissue and the periosteum along the entire border of the concha and continued along and adjacent to the anterior border of the helix which forms the apex of the triangle where it meets the outer end of the second incision.

"These incisions are so designed that they remain extra—cartilaginous and extramuscular. The incisions are carefully outlined at first by carrying them through the skin only; when the correct outline is successfully obtained they may then be carried deeper through the rest of the membranous layers down to the bony surface of the temporal bone. The importance of making these incisions with the greatest accuracy is twofold:

"1. On these incisions depends the surgical accessibility of the temporal bone.

"2. The incisions designate the extent of the cutaneous lining of the posterior and superior walls of the canal which is to be left behind and later employed in the creation of the tympanomeatal membrane. A triangular flap of membranous tissue results from these three incisions. A periosteal elevator is now inserted into the first incision and while the underlying bony surface is hugged with the instrument, the entire triangular flap is lifted from its attachment to the bony surface. The upper and lower ends of this flap are then freed from their final attachment with the aid of a curved scissors. This triangular flap which consists of the outer third of the membranous lining of the posterior and the superoposterior wall of the canal and contains hair follicles and ceruminous glands is removed and discarded. The removal of this membranous flap results in an endaural extracartilaginous membranous window for the antauricular approach to the temporal bone. The endaural membranous window is now mobilized by a subperiosteal elevation of both the postauricular skin and periosteum covering the outer mastoid cortex and antauricular skin and periosteum covering the posterior root of the zygoma. Two retractors are inserted and held in position by an assistant. With the retractors in position, the endaural membranous window is freely movable thereby permitting a direct

Plate No. 4. Radical Mastoid Operation, left ear, showing exposure of the facial nerve in its tympanic and mastoid segments.

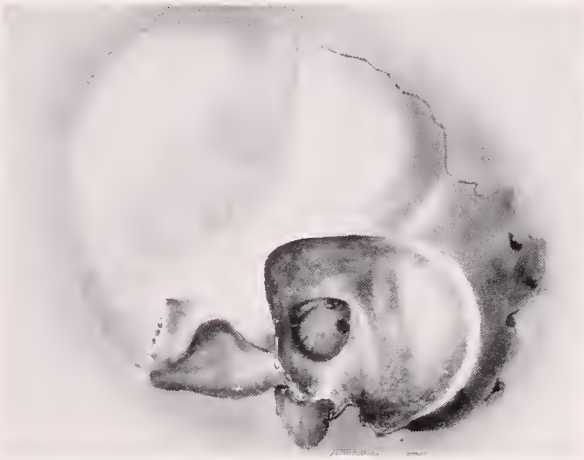

Plate No. 5. Left Radical Mastoid Cavity showing the openings in the horizontal, posterior and superior semicircular canals, also the canals for the facial nerve and the tensor tympani muscle with the opening in the oval and round windows.

Plate No. 3. Cavity, left ear, showing a complete Radical Operation.

and adequate surgical approach to the temporal bone. The first endaural exposure of the bone obtained with this technic reveals the outer mastoid cortex with Macewen's area, the spine of Henle, the outer border of the anterior mastoid, cortex and the posterior root of the zygoma."

INDICATIONS FOR OPERATION IN CHRONIC MASTOIDITIS

There are two reasons for operating in a case of chronic infection of the mastoid. The first is to check necrosis which may endanger the life of the patient. The second is to preserve practical serviceable hearing. A careful study by a competent otologist is necessary to give the correct decision in the individual case. In an article by the writer in the American Journal of Surgery, the following statements were made:

"A continuous foul smelling discharge from the ear persisting in spite of careful local treatment, indicates necrosis of the tissues under the temporal bone; realizing that it lies in the angle between the cerebrum and cerebellum together with the labyrinth, meninges and other intracranial structures, it can readily be seen why neglected necrosis may be dangerous to life itself.

"It must be determined when this destruction reaches or passes the danger point. In some instances the decision is a most difficult one."

CLASS DIVISION

In order to facilitate the discussion, the cases will be divided into three classes, remembering that there are no distinct dividing lines between them and that especially with an additional infection, one may readily be converted into the other.

The classes are as follows:

CLASS ONE

Chronic discharging ears in which operation is not indicated.

Generally speaking, this type lacks the essential evidence of bone destruction. These cases might well be termed mucous memberane infections. The discharge is largely due to an involvement of the mucous membrane of the middle ear and eustachian tube. It is mucoid in character. The foul odor indicative of bone necrosis is missing. Physical examination shows a clean-cut perforation or destruction of the drum. The mucous membrane of the middle ear is free from granulation and polypi; after the discharge is removed, the membrane usually has a red healthy appearance. The tympanic probe discloses no evidence of bare bone. There is nothing to indicate bony destruction in the attic, antrum or mastoid. The discharge is frequently intermittent, recurring with each attack of acute nasopharyngitis. It is possible at any time to have an acute exacerbation thus with the conversion of the case into class two or three but, unless this occurs, there is no reason for advising a mastoid operation in this type of infection.

CLASS TWO

Cases demanding immediate operation.

These either have symptoms which demand immediate exploration or there is concrete evidence of an intracranial extension of the infection. Included under this heading are subperiosteal abscess, facial paralysis, cholesteatomas, acute exacerbation of chronic mastoditis, sagging canal wall and evidence of an intracranial complication such as brain abscess, meningitis, labyrinthitis, sinus thrombosis and cavernous sinus trombosis.

Cholesteatoma, if allowed to remain undisturbed, slowly but surely enlarges, destroying the bone as well as the soft tissues, and may well result in an intracranial complication.

Facial paralysis may be the first warning of an extensive destruction and demands immediate exploration. Careful removal of the diseased bone usually is followed by complete restoration of facial function.

Subperiosteal abscess indicates a cortical perforation due to a cholesteatoma or extensive necrosis; an acute exacerbation of a chronic infection is particularly apt to be dangerous and means an additional infection upon an old one and may mean an extension of the infection beyond the mastoid. Prompt exploration may limit or prevent an ensuing intracranial complication.

A definite sagging of the superior and inner cannal wall, a high temperature, intense discharge, nausea, vomiting, nystagmus, dizziness, stiff neck, occurring separately or collectively, demand immediate operation.

Evidence of labyrinth infection in the presence of chronic mastoid infection demands a radical operation but may or may not require a labyrinth operation.

Very fortunately at this time, we have the antibiotics (especially sulfadiazine, penicillin and aureomycin) to call upon and are able to check many of the intracranial infections which formerly resulted in diffuse meningitis and death.

CLASS THREE

Doubtful Cases.

These have been purposely placed last. Included are the ears with few or any symptoms other than the discharge. One may have discharged a number of years and not be dangerous; another of equal duration may be very dangerous. There are a number of different factors to be considered since any combination of them may enter the individual case. Some of them are as follows:

History.
Hearing.
Fever, pain, tenderness.
The presence of polypi or granulation.
X-ray examination.
Physical examination of the ear.
Character of discharge.

History.—In order that the deeper structures of the mastoid be involved, it is necessary that the infection be a severe one or that the patient's resistance be materially lowered by concurring infection. For this reason nearly all cases of chronic mastoiditis are the result of severe systemic infection. Even today with the dangerous infections becoming fewer they usually date back to a severe attack of scarlet fever, measles or diphtheria during childhood, with influenza, pneumonia and other infections playing a part.

Hearing.—In a large majority of cases, the loss of hearing is due to disturbed conduction. The nerve and inner ear are not involved. The hearing is first lowered by the inflammation and drum perforation. Next by the necrosis of the ossicular chain and then by the mechanical obstruction due to surrounding granulation tissue. Some of the extensive infections may leave sufficient drum and conduction apparatus present to make it possible to conserve good practical hearing. The hearing should be carefully tested and the operator should be prepared to do a modified operation which may make it possible to conserve a good part of the conducting apparatus. If there is too much necrosis present, it may be necessary to disregard the hearing and do a complete radical operation.

Presence of Polypi or Granulation.—It is well known that granulation may quickly form from a small break in the mucous membrane and we have doubtless seen cessation of the discharge almost immediately follow its removal. It will then depend on the origin. If it is recent and coming from a small break in the mucous membrane of the middle ear, simple removal followed by treatment will result in a dry ear. If it is long standing and coming from extensive necrosis, a recurrence takes place immediately and operation usually is necessary.

Fever, Pain, Tenderness.—These symptoms do not ordinarily occur with chronic aural discharge. Their presence individually or collectively demands immediate investigation. A high temperature means either acute infection added to the old one or beginning intracranial extension of the infection. Pain usually is absent. If present and persistent it is apt to mean involvement of the dura, labyrinth or brain.

Intense headache accompanied by marked insomnia is suggestive of brain abscess especially in the cerebellar fossa. Tenderness is absent unless there should be a cortical perforation following a cholesteatoma or external destruction of bone. Generally speaking, the occurrence of the aforementioned symptoms would suggest an immediate exploration.

Value of the X-Ray.—Films made over a period of years by the best radiologist available have completely failed in a number of instances in my experience to give an accurate picture of the necrosis present. This is not the fault of the radiologist but is due to the thick cortex and the dense sclerotic bone surrounding the area of necrosis. The x-ray alone may be diagnostic in the case of extensive necrosis or a large cholesteatoma, and should always be made; however, it may be entirely negative in cases in which there is dangerous deep-seated osseous destruction, and it cannot be relied upon as a sole guide to a correct diagnosis.

Bacteriologic Examination.—In many instances, cholesteatomas may be identified under the microscope, otherwise very little help can be expected from a bacteriologic examination.

A smear and culture made from a chronic discharge usually shows a mixed infection. The causative organisms, streptococci or pneumococci long since have been destroyed and can be demonstrated in large quantities only in the presence of an acute exacerbation of the infection.

Physical Examination of the Ear—After having examined a large number of chronicural infections, one instinctively suspects deep-seated necrosis in a given case. However, the complex is not always easy to describe. Where there is extensive bone destruction, the picture is just the reverse of the one described in the class one or the mucous membrane infections.

Instead of the clean-cut perforation with the mucoid discharge, there is a ragged marginal perforation or complete destruction of the drum. The tympanum contains numerous granulations.

There is partial or complete destruction of the ossicular chain. The hearing is apt to show a decided loss. There usually is a distinct fistulous tract ending upward into the attic and backward to the mastoid. The tympanic probe discloses bare bone. The discharge is purulent, very foul smelling and remains unchanged by local treatment. The picture as a whole is one of occeous destruction.

Character of the Discharge—In the absence of symptoms and a negative or nonproductive physical examination, the decision rests largely on the type and character of the discharge and its reaction to local treatment. When the infection is confined to the middle ear, the reaction to local treatment is favorable. The foul odor disappears, the discharge becomes mucoid and intermittent, or stops entirely.

A continued foul smelling discharge persisting in spite of adequate local treatment means a deep-seated infection inaccessible to boric irrigations and alcohol drops and, in my opinion, is safer with an operation.

A study of the foregoing symptoms and their classifications should enable the otologist to give the proper advice to the individual with long standing aural suppuration.

THE CHOICE OF OPERATION

The decision to operate having been reached, it becomes the duty of the surgeon first to remove the danger and then, if possible, to conserve the hearing.

The majority of chronic mastoid infections occur in dense sclerotic bones. It is therefore almost impossible to determine the extent of the necrosis before operation. The extent of the bone destructioin should dictate the type of operation. The otologist must be prepared to perform a complete simple, modified or a complete radical operation.

The hearing is very carefully tested and if serviceable practical hearing still is present, a modified radical operation should be done if the necrosis permits. In the presence of extensive and dangerous necrosis and little or no practical hearing, the complete radical operation is the choice.

Especially in young children with a chronic discharge, complete removal of the tonsils and adenoids and then very complete simple mastoidectomy with exposure of the ossicular chain without their removal will result in a dry ear with good hearing. This is done by the postauricular route.

For the modified and the radical operations as stated above, my choice is the endaural route. The plan of procedure is as follows:

After the endaural approach and exposure of the mastoid have been accomplished, the mastoid antrum is opened. The diseased bone and granulation tissue in the antrum and mastoid are completely removed, the external attic wall is dissected and removed as in the fenestration operation. This permits very thorough exposure and inspection of the malleus and incus. It then can be determined whether the necrosis requires their removal or whether after the granulation is removed, the ossicles may be permitted to remain. The facial ridge is lowered and it may or may not be necessary to remove the upper part of the annulus. This procedure I have found especially helpful in dealing with attic perforations with cholesteatoma. It is a well established fact that cholesteatoma if undisturbed will destroy the drum, ossicles and hearing. The foregoing technic, has been used together with the removal of the incus and the cutting off of the head of the malleus; the lower part of the drum is not removed and the eustachian tube also is undisturbed. This accomplishes two important objectives: It allows the lower part of the drum to remain and permits enough practical hearing to avoid the use of a hearing aid.

Secondly, the endaural incisions enlarge the membranous opening in the canal the same as the flap that is cut following the postauricular radical. This permits free access to the attic and mastoid cavity and permits the removal without operation of any cholesteatoma that may trend to reform in the months and years following the operation.

Many of the attic perforations with cholesteatomas are bilateral. It is very important to avoid radical operation in these cases since complete exenteration of the entire contents of the mastoid and middle ear will result in serious impairment of the hearing. Another important fact to be remembered is that if a modified operation is tried and proves unsuccessful, a complete radical operation may always be performed.

Quoting from an article by the writer on the technic of the radical operation presented before the American Otological Society, in 1930, the steps of the radical operation were listed, as follows:

The mastoid incision and exposure of the cortex.
Entrance to the mastoid antrum.
Removal of the posterior wall of the bony canal.
Removal of the debris from the middle ear.
Preliminary lowering of the facial ridge.
Removal of the external attic wall.
Removal of the annulus tympanicus.

Curettage of the eustachian tube.
Final reduction of the facial ridge and the exenteration of the hypotampanic space.
Lowering of the floor and the anterior wall of the canal.
Inspection of the radical cavity.
Cutting the flap.
Closure of the wound.

The removal of the tensor tympanic muscle is optional and is not necessary in all cases.

CONCLUSIONS

The postauricular and endaural approach both furnish an adequate exposure of the mastoid cortex for the modified and radical operation.

The endural approach is the method of election in the writer's opinion.

All cases of chronic mastoid infection are not operative.

A foul smelling, purulent discharge persisting in spite of adequate local treatment is safer with an operation.

The majority of cases of chronic mastoid infection occur in dense sclerotic bones. In many instances, it is impossible to determine the extent of the necrosis before operation; the extent of the bone destruction should dictate the type of operation.

In cholesteatoma with attic perforation, a modified radical operation with the removal of the incus and head of the malleus, allowing the lower part of the drum to remain, preserves practical hearing and controls the cholesteatoma.

A complete radical operation is indicated in extensive chronic aural suppuration with little, if any, practical hearing.

MALPRACTICE PITFALLS

Although the relation of physician and patient may be, and is perhaps generally, created by contract, the duty of the physician when he assumes the relationship is fixed by rules which operate independently of its origin.

The duty of the physician to exercise the requisite degree of skill and care is predicated by the law on the relation of physician and patient. The duty is not affected by the fact that the service is rendered gratuitously, or by the fact that the physician is employed by a third person so that no contractual relation exists between him and the patient.

The physician is in a position of trust and confidence as regards his patient. It is his duty to act with the utmost good faith toward the patient. If he knows that he cannot accomplish a cure or that the treatment adopted will probably be of no benefit, it is his duty to advise his patient of these facts.—Dan O. Kilroy, M. D., in Bull. Sacramento County (Cal.) Med. Soc.

DON'T DICTATE CHILD'S CAREER

Why do parents insist upon crippling their children's lives by dictating their careers? Do age and experience always give them wisdom to make the wisest choice?

Physicians are often in a position to remind parents that the only way they can honestly qualify to guide and advise their children in the choice of their life's work is to study each child from infancy, sympathetically and continuously.

Too many mothers and fathers need to realize that no man can make his best contribution unless he is doing the work he enjoys and for which he is best equipped physically, mentally, and emotionally. Not through dictation, but through gentleness, understanding, alertness and direction across the years of childhood and youth can parents solve the riddle of their supreme duty—to help their children to the most satisfying life.—J. Florida Med. Assn.

EUGENICS AND HEREDITY

It is conceivable that one of the main contributions of human genetics to medical progress will be its influence on the development of physiology and biochemistry. It is not perhaps always remembered that cystine was first produced by a congenital cystinuric, and that this unfortunate victim of stone in the bladder played a substantial if indirect part in saving the lives of sufferers from arsenic poisoning treated with British anti-lewisite a century after his death.

At the present time a study of what can fairly be called the congenital diseases of the mould Neurospora is elucidating the intermediary metabolism of the amino-acids.

It is almost certain that when we understand why phenylketonuria—which is due to a block in phenylalanine metabolism affecting the whole body—profoundly disturbs brain function without affecting that of other organs, we shall have enough clues to the peculiarities of brain metabolism to open a new chapter in pharmacology.

When we understand just what has gone wrong with bone metabolism in the osteopsathyrosis associated with blue sclerotics, we may be able to speed up the healing of fractures.

A genetically determined disease, like any other, may be regarded as an experiment performed by nature on a patient. But it differs from most infectious diseases in being a far more precise experiment.

Whereas tuberculosis can kill by damaging almost any organ in the body, a disease of the type studied by geneticists is due to an abnormality of one or two genes in each cell nucleus, the genes playing the same sort of parts in the physiology of the cell as organs do in that of the body as a whole. Each such disease is a disturbance of a particular function, and may be compared with a malady such as Graves's or Addison's disease which has not only demonstrated the function of a particular organ but led to the discoveries of substances as valuable as thyroxine and cortisone.—British Med. J.

Eosinophilia in pleural effusion fluid should raise the suspicion of tuberculosis.—W. S. R. in Detroit Med. News.

The President's Page

The second annual press-radio conference was held in Charleston January 28 with a good representation present from all groups. The feeling was expressed generally that there has been a marked improvement in relations between the doctors and the press and radio during the past year. The members of the three groups are beginning to understand each other much better and this understanding has resulted in increased efforts to solve mutual problems.

A doctor-press-radio Code of Ethics was adopted at the meeting and is being reproduced elsewhere in this issue of the Journal. The Code has previously been approved unanimously by the Council of the West Virginia State Medical Association.

One interesting point was developed with respect to national press releases regarding what Dr. X, of X Clinic, says concerning the wonders that his new drug will work for certain diseases. Some newspapers take the attitude that the story is news even if the drug is worthless, but doctors hold that the report should not be printed until it is ascertained if the drug will really do what Doctor X says it will do.

To handle situations of this nature, it was agreed that each component society should appoint two or three official spokesmen, and that the press-radio groups would add individual opinions to releases concerning miracle drugs and treatments.

It seems to me that the most important thing in the life of a representative of the press or radio is to be accurate in news reports and to print the news while it is still news. To help the press and the radio accomplish these wants, I express the sincere hope that each hospital and medical group will cooperate in the matter quickly for accurate news releases.

The success of the Code depends to a great extent upon the attitude of the individual physician, and we hope for full cooperation from the members of the West Virginia State Medical Association.

Frank J. Salvaggio

President.

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JUST RECOGNITION

This editorial is being written without consultation with or the knowledge or consent of the editor of the West Virginia Medical Journal, who has just recently received one of the highest honors ever accorded a West Virginia doctor.

Dr. Walter E. Vest, of Huntington, has been named president elect of the Federation of State Medical Boards of the United States, and will take office in February, 1952. The importance of the office can be better realized when it is understood that the Federation is a voluntary organization of the licensing boards of all of the states and territories, with but two exceptions. Representatives of the state boards meet annually to discuss mutual problems.

Doctor Vest has for nearly twenty years served as a member of the West Virginia Medical Licensing Board, until two years ago known as the Public Health Council. For at least half of that time he has been its chairman. So, the great honor that has come to him is richly deserved and is a just recognition of his painstaking efforts to uphold the high standards of the groups of which he will soon be the president.

Doctor Vest has held many high offices in organized medicine. For several years he has served as editor of the West Virginia Medical Journal and as a member of the House of Delegates of the American Medical Association. He is a past president of the West Virginia State Medical Association and the Southern Medical Association.

We believe that we speak for all of the members of the West Virginia State Medical Association when we extend heartiest congratulations to him and best wishes for success in his new office.

MEDICAL EDUCATION—IN MARCH

One of the most interesting programs ever arranged for a one-day medical meeting in West Virginia will be presented at the Greenbrier, in White Sulphur Springs, March 15, 1951. This will be the first of a series of three such meetings during the year. The next one will be held in Charleston, and the third in Clarksburg.

The March meeting is being sponsored by the Committee on Medical Education, the Greenbrier Valley Medical Society and the Alleghany-Bath (Virginia) Medical Sosciety. The importance of the topics to be discussed and the prominence of the speakers at the morning and afternoon sessions should result in a large attendance of doctors from the Virginias. It is not too much to ask or expect that all of the members of the West Virginia State Medical Association make every effort to be present.

We commend the Committee on Medical Education for arranging this joint meeting. It is well that members of the profession in Virginia and West Virginia know each other a little better. A meeting of this character will enable us to discuss together problems of mutual interest.

We hope that there will be a good attendance of doctors from both states at this meeting, which will undoubtedly be one of the most interesting medical meetings ever presented anywhere in West Virginia or Virginia.

Come to the Greenbrier March 15.

FIRST AID FOR PRESS-RADIO

The relationship in the past between the medical profession and press or radio has often been tinged with acrimony. Newsmen accused doctors and hospitals of being uncooperative, while the medicos were wont to regard reporters as nosy nuisances. A step in the right direction has been made now, however, at least in our own state.

The West Virginia State Medical Association held a press-radio conference in Charleston, Jan. 28, wherein all comers, including doctors,

could speak their minds. A code covering relationships between the groups was adopted, and while not perfect, it is a beginning, a foundation for more harmonious functioning in the future.

On such a basis, it may be possible for the press-radio and medical groups to be helpful one to the other, rather than serving as hindrances either in the gathering and disseminating of news or the treatment and correction of ills and injuries.—The Kanawha Citizen.

NIGHT CALLS

As we listened to the presidential address of Dr. R. D. Bernard before the National Conference on Medical Service, we saw our own state mirrored. The theme of the address was "Weakness of Local Medical Societies," and the subject of night calls loomed large.

We wonder if the larger societies in West Virginia are meeting their obligations to the public as to night and emergency calls. It is a distinct obligation of the local society to develop a mechanism whereby these calls may be answered, certainly in the urban areas. In rural communities the problem is, of course, much different.

Many cities have solved the problem, and Erie, Pennsylvania, is on outstanding example. No single activity of a local medical society can be productive of better public relations, and if the pay angle — 95 per cent reported collections — is considered, certainly it is as good business as the remainder of medical practice.

It certainly behooves us to work out plans whereby this medical demand may be met.

IT CAN BE DONE

A useful by-product of attacks on democracy has been the stimulus it provided to cure its defects.

Some years ago, for example, the American Medical Association was viewing health insurance with alarm and hostility. Then came the New Deal effort to make such insurance compulsory, enforced by taxes and a giant bureaucracy.

The other day, Dr. Elmer L. Henderson, president of the A.M.A., reported proudly that more than 70 million Americans now have some form of voluntary health insurance.

The fight against socialized medicine is not yet won completely. But this is the way to win it — by proving that it can be done without loss of liberty.—Chicago Daily News.

GENERAL NEWS

FATE OF FOUR-YEAR SCHOOL RESTS WITH 50TH LEGISLATURE

The fate of legislation which will assure the building of a four-year school of medicine, dentistry and nursing in West Virginia rests with the Senate and the House of Delegates as this issue of the Journal goes to press (February 19).

The bill sponsored by Gov. Okey L. Patteson, providing for a tax on soft drinks to finance a four-year school was reported out favorably by the House Committee on Finance. There was a substantial majority in favor of the action taken. This bill is now on the House calendar and it was expected that the matter would be decided definitely by that body within two or three days.

The Senate Committee on Finance still had the tax bill under consideration, and there was no indication when there would be definite action although it was reported unofficially that the committee would act on the bill before the first of March.

The administration bill in the House and Senate earmarks revenues from the tax on soft drinks for a four-year school. Shortly after the bill was introduced, Dr. Charles E. Watkins, of Oak Hill, chairman of the Council, with the approval of the president, Dr. Frank J. Holroyd, of Princeton, and the chairman of the Fact Finding and Legislative Committee, Dr. Thomas G. Reed, of Charleston, directed that a poll of the Council be taken by phone on the adoption of a resolution approving the Governor's proposal. The poll was completed February 9, 1951, resulting in overwhelming approval of the bill providing for a tax on soft drinks.

Resolution Approving Tax Adopted

The resolution adopted by the Council is as follows:

WHEREAS, The need for a four-year school of medicine, dentistry, and nursing in West Virginia is becoming increasingly apparent, particularly in view of the critical shortage of doctors, dentists, and nurses; and,

WHEREAS, The Governor of this state has proposed, as the method of financing such a school, the levying of a tax on soft drinks, the total revenues from which would be earmarked for the construction and maintenance of the school; and,

WHEREAS, The Governor's proposals are incorporated in and made a part of SB 180—HB 268, introduced in the Legislature; and,

WHEREAS, It is believed that the overwhelming majority of the citizens of this state would accept such a tax willingly with the understanding that the proceeds would be used exclusively for the purpose stated; and,

WHEREAS, It is also believed that the bottlers of West Virginia, when they fully realize the great need for the establishment and maintenance of a four-year school in this state will, as a patriotic duty and as good citizens, accept the tax on soft drinks and cooperate to the fullest extent in the collection thereof:

THEREFORE, BE IT RESOLVED, That the Council of the West Virginia State Medical Association wholeheartedly approves Governor Okey L. Patteson's proposal for the levying of a special tax on soft drinks for the purpose of obtaining revenue for the construction and maintenance in this state of a four-year school of medicine, dentistry, and nursing as a part of West Virginia University, and urges the Legislature to accept the proposal and enact the bill (SB 180—HB 268) into law during the present session; and,

BE IT FURTHER RESOLVED, That copies of this resolution be mailed to the Governor, the President of the Senate, the Speaker of the House of Delegates, and each member of the Legislature.

As this news article is being written, the administration bill providing for the creation of a four-year school of medicine, dentistry and nursing had not been introduced in either branch of the legislature. It is thought that the Governor has requested that this action be held up pending the disposition of the bill providing for a tax on soft drinks to provide funds for the construction and maintenance of the school.

Separate hearings on the soft drink measure were held February 13 by the House and Senate Committees on Finance. The Senate hearing was in the morning and the House hearing in the afternoon. Some bottlers opposed the tax, while some favored it.

Dr. D. A. MacGregor, of Wheeling, a member of the fact finding and legislative committee, spoke on behalf of the State Medical Association. He strongly urged the passage of the bill. The following officials and members of the Association were also present at the hearing: Dr. Frank J. Holroyd, of Princeton, president; Dr. Charles E. Watkins, of Oak Hill, chairman of the council; Dr. Thomas G. Reed, of Charleston, chairman of the fact finding and legislative committee; Dr. Frank V. Langfitt, of Clarksburg, Dr. Thomas Bess, of Keyser, and Dr. R. J. Wilkinson, of Huntington, members of the steering committee on Four-Year School; Dr. James S. Klumpp, of Huntington, Dr. Guy H. Michael, of Parsons, and Dr. F. Lloyd Blair, of Parkersburg.

COMMITTEES ANNOUNCE 1951 PROGRAMS

The 1951 programs of various standing and special committees were presented by Dr. Frank J. Holroyd, the president, before a meeting of the Council held in Charleston, January 27. The following is an abstract of the programs presented by Doctor Holroyd and approved by the Council:

Tuberculosis Committee

A sufficient appropriation by the legislature to cover the cost of necessary out-patient pneumothorax refills, the expenditure of such a fund to be supervised by the bureau of tuberculosis control of the state department of health.

Encouragement of the diagnosis of pulmonary tuberculosis by the general practitioner, and recommendation that one meeting annually in each society be devoted to a discussion of this subject. Consultation by the general practitioner with the staff of a state sanatorium concerning the treatment that should be accorded the patient at home before his transfer to such sanatorium. Recommendation that, if finances can be found for the purpose, all patients admitted to general hospitals be given chest X-rays.

Cancer Committee

Recommendation to the house of delegates that necessary arrangements be made for the registration of all cancer cases through the state department of health.

Development of a statewide cancer program and recommendation that each component society devote one meeting annually to the treatment of cancer.

Organization of teams in strategic locations in the state to assume charge of programs of early diagnosis of cancer. Preparation and distribution of appropriate cancer films for the profession and laity to be used in connection with programs arranged by component societies.

Committee on Medical Educotion

Recommendation that a list of available speakers for appearances before component societies be prepared, and that the committee undertake to procure the services of a speaker for any component society requesting this service. Recommendation that the West Virginia State Medical Association and West Virginia University School of Medicine sponsor three one-day meetings to be held as follows: White Sulphur Springs, March 15; Charleston, May 15; and Clarksburg, October 15. Meetings to be financed from funds furnished by the sponsoring organizations.

Child Welfore Committee

Recommendation that support be accorded an amendment to the crippled children's law so as to provide for a wider interpretation of its provisions. Each component society to be requested to devote one meeting each year to pediatric problems, with especial emphasis on the care of the newborn, full term and premature, breast feeding, over-stimulation and overfeeding, and provision for adequate equipment in newborn nurseries.

Recommendation that the West Virginia Hospital Association be requested to urge that all hospitals in the state operate newborn nurseries in conformity with the standards set up by the West Virginia hospital licensing law.

Development of an accident prevention program. Each pediatrician to be asked to prepare an address and to submit a list of local speakers who are willing to appear before PTA and other interested groups.

Improved relations between private physicians and public health officials. The state department of health to be requested to sponsor refresher courses in pediatrics in rural areas throughout the state. Full cooperation in the pediatric program to be presented in connection with the annual meeting at White Sulphur Springs, July 19-21, 1951.

All men's gains are the fruit of venturing.—Herodotus.

COUNCIL CLEARS HEAVY AGENDA IN OVERTIME SESSION AT CHARLESTON

A heavy agenda for the winter meeting of the Council at Charleston, January 27, 1951, necessitated an overtime session. The Council convened at six o'clock in the evening and adjourned shortly before midnight.

Honorary Members Elected

The following members were elected to honorary life-time membership: James H. Baber and Francis Xavier Schuller, of Huntington; Fitzhugh Lee Banks, of Beckley; John Madison Cofer, of Bergoo; James M. Skinner, Jr., of New Martinsville; and Hugh Graves Thompson, of Charleston.

Waiver of Dues

It was unanimously ordered that waiver of dues of members entering active service with our armed forces conform with the regulations of the AMA concerning the waiver of dues. This means that members reporting for active service prior to January 1 will not pay dues for 1951. Those reporting for duty before July 1 will pay one-half year's dues, and those entering the service after July 1 will pay dues for the entire year but will be exempt from the payment of such dues thereafter while they remain in the service.

Complaints of Service Plans Aired

It was reported that the state insurance commissioner has reduced nine specific items in the fee schedule of West Virginia Medical Service, Inc., of Wheeling, which had been submitted to him solely for actuarial calculations. Dr. D. A. MacGregor, of Wheeling, appearing at the invitation of the chairman of the Council, stated that the medical service plan in his city had appealed from the decision of the insurance commissioner to the Kanawha County Circuit Court, and that a hearing would be held before Judge Bouchelle on January 30, 1951, on the request of the service plan for a review of the commissioner's ruling.

Doctor MacGregor made the point that in his opinion doctor members in a service plan have a right to fix their own fees and that the commissioner does not have the right to alter such fees in any respect, but does have the right to see that all of the service plans are kept actuarially sound.

Dr. E. L. Gage, of Bluefield, reported that the contract of Associated Hospitals, Inc., of his city, provides that that organization shall have the right to examine any hospital record or medical history relative to any member. He said that members of the board of the service plan believe that this provision is contrary to the general code of medical ethics, and that the section was provisionally changed in accordance with the views of the members. However, he reported that the insurance commissioner had informed the board that the contract should be written so as to conform with the language of the standard contract, and he asked that this matter be reviewed by the Council.

After full discussion of the matters reported by Drs. MacGregor and Gage, the Council went on record as strongly disapproving the action of the insurance commissioner in the cases cited, and directed its committee on hospital and medical service plans to contact the insurance commissioner and inform him of the Council's action. The committee, of which Dr. James S. Klumpp, of Huntington, is the chairman, is to report back at the next meeting.

Code of Autopsy Procedures

Dr. Russell Kessel, of Charleston, reported that the Code of Autopsy Procedures, which has been approved by the Council, has been agreed upon finally by all of the groups concerned with its adoption. The Council directed that one-third of the expenses of publishing and distributing the Code be borne by the State Medical Association.

SS Advisory Committee Reports

A full report concerning the activities of the West Virginia Advisory Committee to Selective Service was submitted by the chairman, Doctor Kessel, and he reported specifically concerning the status of doctors who have been required to register under the selective service act.

1951 Overall Program

An abstract of the overall 1951 program of the State Medical Association was presented by the President, Dr. Frank J. Holroyd. The program was agreed to at a meeting of some of the heads of the active committees held during the afternoon of January 27.

Will Sponsor Three Meetings

The Council directed that the sum of $600 be appropriated for the use of the committee on medical education in arranging three postgraduate courses in West Virginia during the year, one to be held at White Sulphur Springs, one at Charleston, and one at Clarksburg.

Code of Ethics Adopted

The proposed doctor-press-radio Code of Ethics, which was submitted to the Council by Doctor Gage, was unanimously adopted.

Legislative Committee Reports

Following the report submitted by Dr. Thomas G. Reed, chairman of the fact finding and legislative committee, the Council went on record as opposing the bill (SB 4—HB 145) pending in the Legislature relating to the practice of osteopathic physicians, and it was ordered that the Association's bill proposing the creation of a composite board be prepared for introduction in that body. It was ordered that a special committee be appointed by the chairman to appear before the Senate committee on the judiciary to oppose the bill relating to osteopathic physicians. The chairman appointed as members of the committee Drs. James S. Klumpp, Walter E. Vest, J. N. Jarrett, and W. Fred Richmond.

The Council went on record as opposing HB 65, providing for the appointment of three laymen as members of the medical licensing board, and HB 169, providing for the payment of disability benefits not com-

pensable under the unemployment compensation and workmen's compensation laws.

The Council also disapproved proposed amendments to the DPA medical advisory board which would provide for the appointment of several additional members, and also disapproved HB 125 pertaining to graduates of medical schools designated Class "A" prior to December 31, 1943.

The provisions of a bill which Doctor Reed stated would be introduced in the Legislature (Ed: SB 163—HB 248), providing for the licensure of certain pathologists in West Virginia, was approved by the Council, together with HB 151, relating to the supervision of state health institutions by the state department of health.

Four-Year School

The following resolution, offered by Doctor Reed, was unanimously adopted:

"WHEREAS, The ever-increasing need for additional physicians, dentists, and nurses in West Virginia has been aggravated lately by the expanding requirements of the national military establishment for medically trained and qualified personnel; and,

"WHEREAS, In consequence of this condition, the citizens of West Virginia are being deprived of needed medical attention and care, there now being but one doctor for approximately each fourteen hundred residents of the state; and,

"WHEREAS, Veterans hospitals constructed at Beckley and Clarksburg cannot be put into operation because physicians and nurses sufficient to man them cannot be secured; and,

"WHEREAS, During recent years, many young West Virginia men and women aspiring to the profession of medicine and dentistry have been thwarted in their ambitions because the facilities necessary for their training were not available in West Virginia, and medical schools elsewhere were already filled to capacity; and,

"WHEREAS, The services which such young men and women could have rendered as doctors are irrevocably lost to the medical profession and the state; and,

"WHEREAS, Despite these grave considerations there has until now been no provision for the establishment of a four-year medical and dental school in West Virginia:

"THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association favors the immediate establishment of a four-year medical, dental, and nursing school in West Virginia, and again urges the 1951 Legislature to enact the legislation necessary to this end with all of the dispatch consistent with sound procedure, and recommends a sound policy of taxation for the establishment and maintenance of the school."

Extension of Voluntary Plans

The following resolution offered by Doctor Klumpp, with reference to the extension of voluntary and medical care plans, was unanimously adopted:

"Inasmuch as the Council of the West Virginia State Medical Association recognizes the importance and necessity of further constructive efforts in providing adequate voluntary hospital and health insurance for the citizens of this state:

"The Council of the West Virginia State Medical Association strongly favors the extension of voluntary hospital and medical care plans throughout the state, primarily through the combined efforts of the existing voluntary plans sponsored by the medical profession, with sole reference to combined efforts in education and sales, and with no consolidation or amalgamation of any existing plans, and with particular effort directed toward the extension of such coverage in rural areas, small employee groups, and individuals."

Clarifying Amendments Adopted

The executive secretary reported two small clarifying amendments to the VA fee schedule, submitted by the Veterans Administration for consideration by the Council, and such amendments were unanimously approved and the president authorized to sign the formal acceptance of such amendments.

Will Study VA Fee Schedule

The chairman was authorized to appoint a committee to study the advisability of seeking amendments to the fee schedule heretofore adopted for use in the veterans care program in this state. The chairman appointed the following as members of the committee: Dr. E. L. Gage, chairman, and Drs. D. C. Ashton and E. H. Hunter.

Members Present

The following members of the Council were present at the meeting: Dr. Charles E. Watkins, chairman of the Council; Dr. Thomas G. Reed, councillor at large; Dr. Frank J. Holroyd, president of the West Virginia State Medical Association; Dr. A. R. Sidell, first vice president; Dr. J. C. Huffman, second vice president; Dr. T. M. Barber, treasurer; and Drs. J. P. McMullen, L. Rush Lambert, Fred R. Whittlesey, Hu C. Myers, E. H. Hunter, George F. Evans, James S. Klumpp, E. L. Gage, D. C. Ashton, and Russel Kessel; and Mr. Charles Lively, secretary ex officio. The meeting was also attended by Dr. D. A. MacGregor, of Wheeling, a member of the fact finding and legislative committee.

RELOCATIONS

Dr. E. M. Clubb, Jr., of Moundsville, will complete his second year of specialty training in urology at the Cleveland Clinic in June, at which time he will become chief urologist resident at Roper Hospital, University of South Carolina, Charleston. Doctor Clubb expects to return to West Virginia to practice upon the completion of his residency in South Carolina.

* * * *

Dr. Edwin O. Daue, Jr., of Beckley, has moved to Harrisburg, Pennsylvania, where he will continue the practice of his specialty of general surgery.

* * * *

Dr. Robert A. McLane, Jr., formerly of Masontown, is now located at River Edge, New Jersey, where he is engaged in general practice, with offices at 151 Reservoir Avenue. Doctor McLane served with our armed forces overseas, 1943-48.

* * * *

Dr. J. L. Leef, of Richwood, has been called to active duty in the Army Medical Corps and is stationed at Fort Sam Houston, San Antonio, Texas.

Carcinoma of the lung in a male non-smoker is a rare occurrance.—J. F. in Ohio St. Med. Journal.

DOCTOR-PRESS-RADIO CODE OF ETHICS ADOPTED AT MEETING IN CHARLESTON

Nearly a hundred representatives of the press, radio, and medical profession attended the annual Press-Radio Conference, sponsored by the West Virginia State Medical Association, at the Daniel Boone Hotel, in Charleston, Sunday, January 28, 1951.

Dr. Frank J. Holroyd, president of the State Medical Association, opened the meeting at 2:30 o'clock and Dr. E. L. Gage, of Bluefield, then presented a doctor-press-radio code of ethics which had been approved the preceding evening by the Council. He recommended the adoption of the code by the conference, and was supported by Francis P. Fisher, of Parkersburg, immediate past president of the West Virginia State Newspaper Council, and George Clinton, also of that city, president of the West Virginia Broadcasters' Association. Several other members of the medical profession and the press and radio spoke in support of the code.

The conference went on record as being unanimously in favor of the adoption of the code, which is to be submitted for formal adoption to the State Newspaper Council and the West Virginia Broadcasters' Association at meetings which will be held early in the spring.

The code, as approved by the conference, is as follows:

Doctor-Press-Radio Code of Ethics

Recognizing the mutual, ethical, moral, and legal responsibilities of the medical profession, the press, and the radio to the public, these groups in West Virginia do hereby establish the following code of cooperation:

1. Designated spokesmen for the state and county medical societies will be available to representatives of the press and radio to give information promptly on health and medical subjects. When advisable, these spokesmen may be quoted by name and title and this shall not be considered a breach of the medical code of ethics.

2. In matters of private practice, the wishes of the attending physician or surgeon will be respected regarding the use of his name or a quotation. He will give information to the press and radio where this does not jeopardize the doctor-patient relationship or violate the confidence, privacy, or legal rights of the patient (and it shall in no way be a breach of the medical code of ethics for him to do so) as follows:

(a) In cases of accident or other emergency: The nature of the injury when ascertained, degree of seriousness, and probable prognosis.

(b) In cases of illness of a personality in whom the public has a rightful interest: The general nature of the illness, its gravity, and current condition.

(c) In cases of unusual illness, injury, or treatment: The above information together with any scientific information which will lead to a better public understanding of the progress of medical science. Any physician becoming aware of such a case will notify the designated spokesman of his local medical society at once for immediate communication of appropriate information to the press and radio.

3. Members of the staff of each hospital will, in the absence of or at the request of the attending physician, designate official spokesmen who shall be competent to given authoritative information to the press and radio about emergency or unusual cases at any time, but this information shall not be such as to jeopardize the hospital-doctor-patient relationship or violate the confidence, privacy, or legal rights of the patient.

4. Representatives of the press and radio recognize that the first obligation of the physician and hospital is to safeguard the life and health of the patient and they will refrain from any action or demands that might jeopardize the patient's life or health. Quotations directly or by name will be accurate in context and content and will be made only upon consent of the spokesman quoted. Editorial judgment will be used to avoid publishing any material which will exploit the patient, doctor, or hospital. In all matters concerning health or medical news, representatives of the press and radio will make all reasonable efforts to obtain authentic information from the qualified sources indicated above before proceeding to publication or broadcast.

Each group represented at the conference supplied a speaker for a roundtable discussion of ways and means for improving doctor-press-radio relations. Frank Knight, of Charleston, managing editor for the Gazette, spoke for the daily newspapers; Henry C. Woodyard, of Spencer, president of the West Virginia State Newspaper Council, for the weeklies; Harry M. Brawley, of Charleston, director of public affairs for Radio Station WCHS, for the radio; and Dr. Paul L. McCuskey, of Parkersburg, co-chairman of the state PR committee, for the medical profession.

After a social hour at 5:15, all present were guests of the State Medical Association at the annual press-radio dinner. Dr. John F. McCuskey, of Clarksburg, co-chairman with Dr. Paul L. McCuskey, of Parkersburg, of the state PR committee, served as toastmaster.

The guest speaker was Mr. Richard Harkness, NBC Washington correspondent, whose subject was "Behind the Scenes on the International Front."

Mr. Harkness presented a vivid picture of conditions as they exist in the world today. He discussed every angle of the international situation, particularly so far as the same pertains to the situation in Korea. He delighted his audience with his rapid answers to all questions propounded at the close of his formal address.

The meeting was timed so that adjournment could be had at 8:30 o'clock in order that many of those present could return home that evening.

FORMER HEALTH OFFICER HONORED BY USPHS

Dr. Albert L. Chapman, formerly connected with the West Virginia State Department of Health, has been named regional director of the USPHS. He was appointed effective January 15, 1951, and succeeds Dr. Mark V. Siegler. As regional medical director, Doctor Chapman will direct public health service administration of federal grants-in-aid in Maryland, North Carolina, and the District of Columbia. He will also supervise grants-in-aid to Puerto Rico and the Virgin Islands and will serve as consultant to the health departments of these areas.

THE RED CROSS IN WEST VIRGINIA

West Virginia will join in the National Blood Program when its first Regional Blood Center opens its doors in Huntington this year. Eight chapters are now cooperating through Blood Centers in nearby states.

Floods in West Virginia during 1950 have required Red Cross rehabilitation expenditures of approximately $380,000 to date. Final costs are not yet available.

According to Red Cross officials, more than 140 trained Red Cross volunteers are serving in the two Veterans Administration hospitals. Volunteers are also serving in local clinics and hospitals, and others are preparing themselves for service when the Regional Blood Center is opened.

West Virginia chapters are actively stepping up first aid and home nursing training programs in keeping with the National Security Resources Board's request that Red Cross train millions in first aid and at least one member of every family in home nursing during the months ahead. In 1950, 5,239 first aid certificates and 1,043 home nursing certificates were earned by West Virginians.

Local chapter Home Service activities are expanding in view of the world situation and the resultant need for increasing assistance to members of the Armed Forces. In 1950, Home Service workers in West Virginia chapters handled 32,050 cases. Financial assistance to active servicemen, veterans and their dependents totalled $89,009.

Junior Red Cross programs are active throughout the state with 245,083 school boys and girls participating as members during 1950.

Chapters in West Virginia are making their resources available to local civil defense authorities, and, as civil defense plans continue to develop, are increasing activities to meet the need to the fullest possible extent.

MLB LICENSES 20 DOCTORS

At a meeting of the Medical Licensing Board, held in Charleston, January 8-10, 1951, twenty doctors were licensed to practice in West Virginia, five by direct examination, and fifteen by reciprocity with other states.

The following is a list of the doctors licensed by direct examination:

Foster, Ray Dewey, Keystone
Martin, Harold Eugene, Elkins
Mimms, John McCluer, Omar
Weisshaus, Stanley Zoltan, New York City
Wulfman, Robert Clifford, Huntington

The following doctors were licensed by reciprocity:

Birt, William Alfred, Milton
Chambers, Doris Elizabeth, Morgantown
German, Richard McEwen, Jr., Oak Hill
Greene, John Pettengill, Huntington
Guthrie, William Henry, Red Jacket
Hamilton, Robert Burke, Fairmont
Howe, Dana Hill, Ameagle
Jellinek, Harold Lester, Elkins
Morgan, Jack Calvin, Fairmont
Nichols, Samuel Irving, Burnwell
Phillips, Joseph Thomas, Jr., Welch
Schwarz, Robert Joseph, Philadelphia, Pa.
Sidow, Robert James, Fairmont
Tepfer, Milton, Friendsville, Maryland
Wilson, Loyal King, Welch

PR PROGRAM FOR 1951 UNFOLDED AT SECRETARIES-PR CONFERENCE

The joint Secretaries-Public Relations Conference held at Charleston, Sunday, January 28, attracted secretaries, treasurers and other representatives of component societies from practically every part of West Virginia. There was a much larger attendance than at any time in the past.

Dr. Charles E. Watkins, of Oak Hill, chairman of the Council, delivered the address of welcome, and presided during the part of the program that was devoted to administrative problems.

Dr. N. H. Dyer, state director of health, discussed the civil defense program, and Dr. E. T. Drake, secretary of the Mingo County Medical Society, reported methods used by him in obtaining improved attendance at Society meetings.

Matters of mutual interest to the State Medical Association and component societies were discussed by Charles Lively, the Executive Secretary.

Dr. John F. McCuskey, of Clarksburg, and Dr. Paul L. McCuskey, of Parkersburg, co-chairmen of the State Public Relations Committee, presided at the second morning sessions. The co-chairmen presented the 1951 public relations program of the West Virginia State Medical Association.

The program, which consists of ten projects, includes recommendations for public relations meetings within the area of each component society; an active speaker's bureau in each group, which will make possible the acceptance of invitations to appear before professional and lay groups anywhere within the state; assistance in nurse recruitment; improvement in relations with the press and radio; sponsorship of another rural health conference, with emphasis being placed on voluntary health plans with a view to obtaining wider rural coverage; and sponsorship of health exhibits at state, district and county meetings.

Mrs. Ross P. Daniels, of Beckley, president of the Woman's Auxiliary to the West Virginia State Medical Association, discussed the extent of auxiliary aid in public relations work, and Mrs. J. C. Huffman, of Buckhannon, submitted a report concerning local society participation in the public relations program.

Mrs. Ben W. Bird, Jr., of Princeton, state auxiliary public relations chairman, discussed the correlation of PR work in local auxiliaries.

Luncheon was served at the close of the meeting, and most of those present remained for the press-radio conference in the afternoon and the annual dinner that evening.

CANCER SOCIETY ELECTS

Dr. Elizabeth McFetridge, of Shepherdstown, was reelected president of the West Virginia Cancer Society at the regular meeting held in Parkersburg, February 18.

The following officers were also reelected: Vice president, Philip Gibson, of Huntington; secretary, J. Ross Hunter, of Charleston; and treasurer, Homer Gebhardt, of Huntington.

OVER 300 RESERVATIONS ALREADY MADE FOR CONVENTION JULY 19-21

There does not seem to be any doubt concerning the success from an attendance standpoint of the 84th annual meeting of the West Virginia State Medical Association which will be held at The Greenbrier in White Sulphur Springs, July 19-21, 1951. As of February 20, reservations have been made for over three hundred doctors, members of the auxiliary and guests. The management has stated that rooms will be made available for 650 guests attending the convention. The overall attendance in 1950 was well over five hundred.

Choice accommodations are still available, and we hope that all members of the Association and the Auxiliary who can possibly do so will make plans to attend the meeting. Part of the program that has been arranged will be made public by the program committee next month. It is now known definitely that Dr. John W. Cline, of San Francisco, who will be installed as president of the American Medical Association at the annual meeting in Atlantic City in June, will appear as guest speaker at the open meeting arranged for Friday evening, July 20. An invitation has also been extended to Dr. Curtice Rosser, of Dallas, Texas, president of the Southern Medical Association, and it is expected that he will also accept.

It is expected that the scientific program will be completed within the next three weeks, and the membership is again assured of the appearance on the program of doctors outstanding in their particular fields.

Arrangements are being made for meetings of every section and affiliated society. These meetings will be held afternoons. All general sessions will be held mornings.

The presidential address is scheduled for the evening of July 19, and the sessions of the House of Delegates will be held July 19th and 20th. The convention will end with the annual banquet on Saturday evening, July 21.

STATE HEALTH CONFERENCE MAY 10-12

The annual State Health Conference is scheduled for Huntington, May 10-12, with headquarters at the Prichard Hotel.

Civil defense and the treatment of atomic casualties will be emphasized during the three-day program. There will be three general sessions, and a panel discussion will be included on the program for the second session. Section meetings will be held the afternoon of the second day and the morning of the third day.

DR. T. C. SIMS HEADS ARC BLOOD CENTER

Dr. Thomas C. Sims, of Fayetteville, health officer for Fayette County since 1946, has resigned to accept appointment as medical director of the Regional American Red Cross Blood Center, in Huntington. The region is composed of Ohio, Kentucky, and West Virginia. Doctor Sims will report for duty March 1.

BLOOD CENTER DEDICATION MARCH 1

Plans have been completed for the Kanawha-Clay chapter of American Red Cross to participate in the Red Cross national blood program. This service, which has already proved its value to many towns and cities throughout the nation, will provide Charleston and neighboring communities with additional large quantities of whole blood.

The Red Cross will pay all the expense of collecting and processing the blood. There may be the customary laboratory charge by the hospital, or the professional fee of the physician, but the blood itself is free.

A center has been established in Huntington to serve as collecting and distributing headquarters for a tri-state area which will include 30 Red Cross chapters, 14 from West Virginia, 11 from Kentucky, and 5 from Ohio.

Blood will be collected from volunteer donors on scheduled visits of a mobile unit traveling out of the Huntington center. In the laboratory of that center the blood will be quickly processed and returned to this community as needed.

The newly constructed Huntington center will be medically inspected on Feb. 20 by Dr. Ross McIntyre, national director of the blood program. Present plans are for a dedication ceremony on March 1, with local chapter receiving their first visits from the mobile unit shortly thereafter.

ACS SECTIONAL MEETING IN MARCH

A sectional meeting of the American College of Surgeons embracing the entire central eastern region of the United States will be held March 5-7 at the Bellevue-Stratford, in Philadelphia. Surgeons, members of the medical profession, medical students, and hospital personnel are invited to attend all sessions.

A clinic program will be presented March 7 at ten Philadelphia hospitals. Dr. W. Emory Burnett is chairman of the Philadelphia committee on arrangements.

The American College of Surgeons, which has a fellowship of more than 17,000 surgeons in the United States, Canada, and other countries, is headed by Dr. Henry W. Cave, of New York City. Dr. Arthur W. Allen, of Boston, is chairman of the board of regents, and Dr. Paul R. Hawley, of Chicago, the director.

STATE DOCTORS ON S.E. SURGICAL PROGRAM

The 19th annual graduate assembly of the Southeastern Surgical Congress will be held at the Hollywood Beach Hotel, Hollywood, Florida, April 11-14, 1951.

Two West Virginia doctors are on the program as guest speakers. Dr. Ray M. Bobbitt, of Huntington, will discuss the "Clinical Aspects of the Ectopic Ureter," and Dr. Hampton St. Clair, of Bluefield, will present a paper on "Thyroidectomy."

Copies of the full program may be obtained by addressing Dr. B. T. Beasley, 701 Hurt Building, Atlanta 3, Georgia.

CAMP FOR DIABETIC CHILDREN, AUG. 26-SEPT. 3

The second annual camp for diabetic children, sponsored by the Diabetes Committee of the State Medical Association and the West Virginia Diabetes Association will be held at Alum Creek, near Charleston, August 26-September 3, 1951. As was the case in 1950, there will be no charge for children attending the camp, but donations will be received from those who wish to help defray the expenses of the 1951 camp.

There will be three resident physicians on full-time duty at the camp in addition to nurses, dieticians, technicians, camp counsellors, and camp directors.

The camp will be operated on much larger scale this year than in 1950, since the fears of many of the parents concerning the effect of camp life on their children have been allayed as the result of the success of last year's camp. There was an almost unanimous request expressed by children attending the 1950 camp to have their names included in the roster for 1951.

Cooperation of all practicing physicians in West Virginia is being asked by the committee and the Diabetes Association, both with respect to providing names of diabetic children who might wish to attend, and by endeavoring to direct donations to the diabetic camp fund.

Contact with diabetic patients from eight through fifteen years of age should be made by physicians and their names mailed to Camp Kno-Koma, 1115 Quarrier Street, Charleston 1, West Virginia.

Detailed information concerning the program and operation of the 1951 camp may be obtained by writing to the chairman of the diabetes committee, Dr. George P. Heffner, 1115 Quarrier Street, Charleston 1, West Virginia.

APRIL 1 DEADLINE FOR PAYMENT OF DUES

The deadline for the payment of dues and special assessment to the State Medical Association is April 1, 1951. Many component societies have just about completed the collection of dues, and, for the most part, members are remitting for AMA dues at the same time their state and local dues are paid.

Dues will be waived for members entering the armed services prior to January 1, 1951. Those who enter active service at any time between January 1 and July 1 will pay one-half year's dues and special assessment. Those called to active service after July 1 will pay for the full year.

This procedure for the waiver of dues, adopted by the Council, follows the pattern for the payment of dues to the American Medical Association.

MLB SCHEDULES SUMMER MEETING

The summer meeting of the Medical Licensing Board will be held July 9-11, 1951, at the Capitol, in Charleston, for the purpose of examining applicants for licensure to practice medicine in West Virginia.

Last year, for the first time, there were less than 1000 deaths from whooping cough in this country.—J. F. in Ohio St. Med. J.

INTERESTING INTERSTATE MEDICAL MEETING PLANNED FOR MARCH 15

The first of a series of one-day meetings sponsored by the Committee on Medical Education of the West Virginia State Medical Association will be in the nature of an interstate meeting at The Greenbrier, in White Sulphur Springs, Thursday, March 15, 1951. The meeting is being sponsored jointly by the committee on medical education, the Greenbrier Valley Medical Society and the Alleghany-Bath (Virginia) Medical Society.

The following program has been arranged by a joint committee from the three groups:

Morning

"Management of Malignancy of the Colon"—Fred W. Rankin, M. D., Lexington, Kentucky.

"The Treatment of Acidosis and Coma"—H. B. Mulholland, M. D., Charlottesville, Virginia.

Afternoon

"Management of the Acute Surgical Abdomen"—Henry W. Cave, M. D., New York City.

"Treatment of Hypertension"—Irvine H. Page, M. D., Cleveland, Ohio.

"Management of Poliomyelitis in the Late Stage"—Alfred W. Shands, Jr., M. D., Wilmington, Delaware.

"Plans for Mobilization of Medical Resources"—Howard Rusk, M. D., New York City.

The morning program will begin promptly at 10:30 o'clock and the afternoon session will be convened at 2:00 o'clock. There will be a recess for luncheon at the Greenbrier. There will be no registration fee, and doctors desiring to remain overnight should make their own reservations with the management at the Greenbrier.

The committee on medical education of the West Virginia State Medical Association is composed of Dr. M. L. Hobbs, Morgantown, Chairman; and Drs. Otis G. King, Bluefield; I. E. Buff, Charleston; Hu C. Myers, Philippi; and J. P. Baker, White Sulphur Springs.

ACCA HONORS DR. WILLIAM E. BRAY

Dr. William E. Bray, of Huntington, has been named a member of the board of regents of the American College of Clinic Administrators. Other members of the board have been named as follows: Leon A. Jaris, Albany, California; Charles E. Heath, Paris, Illinois; Clarence H. Cobb, Durham, North Carolina; Robert L. Woolsey, Fort Smith, Arkansas; Bruce H. Greer, Snyder, Texas; and Abel D. Swirsky, Menninger Foundation, Topeka, Kansas.

R. J. Wilkinson, Jr., of Huntington, is president of the college; E. R. Denison, of Philippi, vice president; and Pat E. Maloney, of Charleston, executive secretary.

Dr. Elmer Lee Henderson, of Louisville, president of the American Medical Association, and Dr. Wallace Yeater, of Washington, D. C., have been named honorary fellows of the college.

DR. WALTER E. VEST PRESIDENT ELECT OF FEDERATION OF LICENSING BOARDS

Dr. Walter E. Vest, of Huntington, was named presdent elect of the Federation of State Medical Boards of the United States at the annual meeting in Chicago, February 13, 1951. He will succeed Dr. Charles L. Shafer, of Kingston, Pennsylvania, who will serve until the annual meeting in February, 1952.

Dr. Frank J. Lawliss, of Richford, Vermont, was elected vice president of the board, and Dr. Walter L. Bierring, of Des Moines, Iowa, secretary.

Doctor Vest is chairman of the medical licensing board of this state, and for many years was president of the public health council prior to the creation of the new licensing board.

The Federation of State Medical Boards is a voluntary organization federating the licensing boards of all the states and territories except Florida and Tennessee, the boards in those two states not having elected to become a part of the Federation.

Representatives of the boards meet two days annually to discuss mutual problems. The meetings are held co-jointly with the Conference on Medical Education so that a general view of progress in medical education and licensure can be had at the same time.

Still another honor came to Doctor Vest on February 11, when he was elected a member of the executive committee of the National Conference on Medical Service at a meeting held in Chicago.

ACAD. OPH. AND OTOL. TO MEET IN APRIL

The annual meeting of the West Virginia Academy of Ophthalmology and Otolaryngology will be held at the Greenbrier, in White Sulphur Springs, April 27-28, 1951. An interesting program has been arranged for the two-day session, which will be attended by members of the Academy from all sections of West Virginia. The following program will be presented:

Friday, April 27

"Cysts of the Peripheral Retina."—Herbert M. Katzin, M. D., New York City.
(Discussion by M. J. Lilly, Jr., M. D.)

"Cataract Surgery by the Occasional Operator."—John Trotter, M. D., Morgantown.
(Discussion by Carl Breisacher, M. D.)

"Virus Infections of the Nose and Throat."—M. F. C. Zubach, M. D., Wheeling.
(Discussion by E. C. Hartman, M. D.)

Saturday, April 28

"Corrective Surgery of the Nose."—J. M. Converse, M. D., New York City.
(Discussion by F. C. Reel, M. D.)

"ACTH and Cortisone Therapy of Ocular Conditions."—Charles M. Polan, M. D., Huntington.
(Discussion by M. W. McGehee, M. D.)

"Diseases of the Larynx."—James T. Spencer, M. D., Charleston. (Movies).
(Discussion by S. S. Hall, M. D.)

RUNNING RIOT IN THE CHEMIST'S SHOP

On all the three main fronts of the National Health Service the Minister of Health's policy is failing. The honeymoon period of the Welfare State is over. The uneasy marriage between the medical profession and the State is now undergoing the strains of an unbalanced domestic economy. The National Health Service, if it is not to fail completely in its aims, will, we are convinced, have to undergo successive modifications in the next few years.

The British Medical Association, it must be recalled, expressed in the years between 1945 and 1948 its "whole-hearted desire" for a comprehensive medical service for the whole of the nation. It did not discriminate between, say, 85% of the population who might find it difficult to meet the cost of modern medicine and the 15% who might afford to do so.

Just before the National Health Service was introduced the Chairman of Council publicly announced that the desire of the profession was to make the service a "resounding success." This must still be its desire.

So far as it is possible to judge, the public at large welcomes what limited benefits the Service brings to it —principally, perhaps, the benefit of not having to pay directly for medical aid at the time of receiving it. And the public has run riot in the chemist's shop—at what a cost it is only just beginning to discover.

The shocking waste of public money over the inessentials of medicine has left little over for what is more urgently needed. Some important drugs are in short supply, not because they are not being produced in adequate quantity but because they cost dollars. Registrars are being sacked because there is not enough money to pay their salaries and, what is more important, not enough to finance the promised expansion of the consultant service.

The people of this country must face the fact that the National Health Service is heading for bankruptcy.—British Medical Journal.

GOITER ASSOCIATION TO MEET

The annual meeting of the American Goiter Association will be held at the Deshler-Wallick hotel, in Columbus, Ohio, May 24-26, 1951. The program for the three-day meeting will consist of papers dealing with goiter and other diseases of the thyroid gland.

Full information concerning the meeting may be obtained by writing to Dr. George C. Shrivers, corresponding secretary, 18½ N. Tejon Street, Colorado Springs, Colorado.

SOMETHING TO DO, LIKE IT OR NOT

Thank God every morning when you get up that you have something to do which must be done, whether you like it or not. Being forced to work, and forced to do your best, will breed in you temperance, self-control, diligence, strength of will, content, and a hundred other virtues which the idle never know.—James Russell Lowell.

Insomnia must be regarded as a typical emotional condition involving the whole patient.—J. F. in Ohio St. Med. J.

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—Editorial: Dramamine,
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RESEARCH IN THE SERVICE OF MEDICINE SEARLE

OBITUARIES

HARRY HOOD ESKER, M. D.

Dr. Harry Hood Esker, 66, of Clarksburg, died of heart disease January 23, 1951, at his home in that city. He was compelled to retire from active practice in 1941 on account of ill health. For the past year his condition had become progressively worse.

Doctor Esker was born in Chillicothe, Ohio, and received his M. D. degree from the University of Maryland School of Medicine in 1906. He interned at Mercy Hospital, Baltimore, and served a residency at the Nursery and Child's Hospital, Bayview, Maryland.

After practicing a short time in Baltimore, Doctor Esker located at Clarksburg, where he continued in active practice until his retirement in 1941.

During World War I, he served as first lieutenant in the medical corps of the army. He had served as vice president and president of his local society.

Doctor Esker was an honorary member of the Harrison County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

* * * *

ARIAS PALMER GIBSON, M. D.

Dr. Arias Palmer Gibson, 69, of Huntington, died at his home in that city, February 13, 1951, following an illness of several months' duration. He had practiced his specialty of ophthalmology and otolaryngology in Huntington for over thirty years.

Doctor Gibson was born at Hellier, Kentucky, and received his M. D. degree in 1905 from the University of Louisville School of Medicine.

He was a member of the Cabell County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

* * * *

MARK DUTY GOOD, M. D.

Dr. Mark Duty Good, 66, of Charleston, died at his home in that city, February 11, 1951.

Doctor Good was born at Paden City, Wetzel county, son of the late Dr. James W. and Eldorado (Van Camp) Good. He received his academic education at Bethany College, and his M. D. degree in 1913 from the University of Louisville School of Medicine. He was a former member of Kanawha Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by a son, Mark D. Good, Jr., and a daughter, Miss Margery Elizabeth Good, both of Charleston.

* * * *

EARL BENNETTE HENSON, M. D.

Dr. Earl Bennette Henson, 60, prominent orthopedic surgeon of Charleston, died at his home in that city, February 10, 1951, following a heart attack. He had been ill for three days.

Doctor Henson was born at Malden, Kanawha county, September 19, 1890, son of the late Walter Carson Henson and Martha Ellen (Wiley) Henson. He was a graduate of Charleston High and Marshall College, and received his M. D. degree in 1914 from the University of Louisville School of Medicine. He interned at St. Elizabeth's Hospital, Covington, Kentucky, and served as a resident at Charleston General Hospital, 1915-18, after which he had postgraduate work at Massachusetts General Hospital.

He was licensed to practice in West Virginia in 1915, and practiced his speciality of orthopedic surgery continuously in that city from the close of World War I until his death. He was a member of the Medical Corps of the Army during World War I, serving as a surgeon and orthopedic consultant.

Doctor Henson was manager of the Marmet Hospital for crippled children, and had always been interested in the treatment of victims of infantile paralysis. The hospital was founded by him in 1941, when he purchased a school building from the Kanawha County Board of Education and converted it into a hospital for crippled children. Another unit was added to the building in 1947, and it is now a 35-bed institution.

Only recently, Doctor Henson discovered that a zipper arrangement attached to the rubber gasket in iron lungs would facilitate the use of the lung without injury or discomfort to the patient. The zipper is now used extensively by orthopedic surgeons throughout the country. Doctor Henson was for several years surgeon to the athletic department of the Charleston High School, and just recently retired from that post.

He was a member of Kanawha Medical Society, the West Virginia State Medical Association, the American Medical Association, and the American College of Surgeons.

Besides his widow, the former Lillian Davidson, he is survived by two children, Mrs. Russell Anderson, of Syracuse, New York, and Earl B. Henson, Jr., a student at Cornell University; a sister, Miss Helen I. Henson, of Charleston; and two brothers, William Lewis and Waldo Henson, both of Charleston.

* * * *

CLIFTON D. KRAFT, M. D.

Dr. Clifton D. Kraft, 69, of Parkersburg, died at his home in that city November 4, 1950. Death was attributed to arteriosclerotic heart disease. He had been ill for several months.

Doctor Kraft was born at Parkersburg, April 10, 1881, son of the late Lewis D. and Emma K. Kraft. He received his M. D. degree in 1907 from the Hospital College of Medicine, Louisville, Kentucky, and practiced for several years at Gallatin, Tennessee. He moved to Parkersburg in 1915, where he engaged in general practice until he was compelled to retire on account of ill health.

He was an honorary member of the Academy of Medicine of Parkersburg, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Delbert A. Fordham, of Marietta, Ohio, and a brother, Arkie D. Kraft, of Marietta.

THEODORE KENSELL OATES, M. D.

Dr. Theodore Kensell Oates, 82, of Martinsburg, died of cerebral hemorrhage at a hospital in that city, February 3, 1951.

Doctor Oates was born at Capon Bridge, West Virginia, and received his M. D. degree from the University of Maryland in 1896, and afterwards had postgraduate work in New York City. He served as superintendent of the City Hospital from its founding in 1909 until his retirement from practice a few years ago. He had practiced in the eastern panhandle for forty-five years, and was a past president of the West Virginia Hospital Association.

Doctor Oates was a member of the Eastern Panhandle Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a son, Dr. Max Oates, of Martinsburg.

* * * *

JOHN EDWARD OFFNER, M. D.

Dr. John Edward Offner, 72, of Fairmont, died February 18, 1951, at his home in that city. He had been in ill health for several months.

Doctor Offner was born at Piedmont April 15, 1878, son of the late Isaac H. and Mary (Kilbaugh) Offner. He received his M. D. degree from Maryland Medical College in 1904, and was licensed to practice medicine in West Virginia that same year. He had post graduate work in surgery at the University of Pennsylvania and at various clinics in Baltimore. During the Spanish American War, he served for nearly two years in the medical corps of the army. He was commissioned a first lieutenant in the navy during World War I, but did not see active duty.

He served for ten years as superintendent of Weston State Hospital, resigning from that post to accept appointment as state health commissioner during the administration of Gov. Matthew M. Neely. He retired from this office in 1947 and returned to Fairmont, where he continued the practice of his specialty of surgery until a few months ago.

Doctor Offner was a member of the Marion County Medical Society, the West Virginia State Medical Association, the American Medical Association, Southern Medical Association, and the Amercan Psychiatric Association.

Besides his widow, he is survived by a son, Edward T. Offner, and a daughter, Mary Louise Offner.

THE GOOD OLD DAYS

It is not uncommon to hear the elders in any profession talk about "the good old days." Just what they mean by this is seldom explained in their conversation. If it could be summed up in one thought, the author believes that their meaning represents a state of mind. In those days an individual enjoyed both the responsibilities and the privileges of life without dictation from the federal government or aid from the local welfare office. A man was proud of the fact that he had responsibilities which he met with a personal satisfaction. —R. B. Davis, M. D., in So. Med. and Surg.

COUNTY SOCIETIES

CABELL

Dr. H. W. Davis, recently appointed superintendent of Huntington State Hospital, was the guest speaker at the regular monthly meeting of the Cabell County Medical Society, held at that Hospital, February 8, 1951. The speaker discussed the matter of existing facilities at this state institution and thanked the people of the Huntington area for their cooperation in his program.

Dr. James R. Bloss very interestingly discussed his connection with the hospital between 1910 and 1914.

At the business meeting following the dinner, Dr. W. A. Birt was elected to membership in the Society.—James A. Heckman, M. D., Secretary.

* * * *

FAYETTE

Dr. Hunter Boggs, of Charleston, was the guest speaker at the regular monthly meeting of the Fayette County Medical Society, held February 6, 1951, at the Hamilton Cafe, in Montgomery. His subject was, "Common Skin Diseases," and his address was illustrated with interesting slides. The paper was discussed by several members of the Society.—Thomas C. Sims, M. D., Secretary.

* * * *

FORT HENRY ACADEMY

Dr. Bradley L. Coley, attending surgeon of the Bone Tumor Department of Memorial Hospital, New York City, was the guest speaker at the regular dinner meeting of the Fort Henry Academy of Medicine, held January 28, in the auditorium of the Wheeling Hospital School of Nursing. The meeting followed a dinner at the Fort Henry Club.

Doctor Coley's subject was, "Some Controversial Points in the Diagnosis and Treatment of Bone Tumors." Discussion was opened by Dr. Fred Harrington and Dr. George Clark, orthopedic surgeons.

The meeting was attended by eighty-five members and guests.—Robert U. Drinkard, M. D., Secretary.

* * * *

HANCOCK

The Hancock County Medical Society, at a meeting held on February 6, went on record in favor of the establishment of a four-year school of medicine, dentistry and nursing in West Virginia.

The Society also went on record as being opposed to the bill introduced in the legislature pertaining to the osteopathic licensing board, but favoring, in its stead, the enactment of the composite licensing board bill also introduced in the legislature. The action of the Society with reference to the approval of the establishment of the four-year school, opposition to the osteopathic bill, and approval of the composite licensing board bill was unanimous.—Eli J. Weller, M. D., Secretary.

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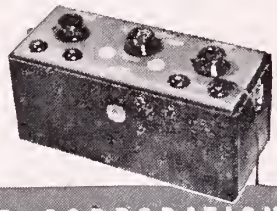

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KANAWHA

The annual dinner dance for members of Kanawha Medical Society and their wives was held at the Daniel Boone Hotel, in Charleston, January 20, 1951, replacing the regular program scheduled for that month.

The guest speaker was the Rev. Fay LeMeadows, pastor of the Congregational Church, Cincinnati, Ohio, who presented an excellent address on the subject of "Life Can and Should Be Fun." His address was enjoyed by the more than 200 persons present.

Charles Lively, executive secretary of the West Virginia State Medical Association, served as toastmaster at the banquet, and he presented the outgoing and the incoming officers of the Society, as well as other guests at the speaker's table.—Robert C. Cock, M. D., Secretary.

* * * *

LOGAN

Dr. H. C. Huntley, of Charleston, director of the Bureau of Disease Control of the State Department of Health, was the guest speaker at the regular monthly meeting of the Logan County Medical Society, held February 14, at the East End Barbecue, in Logan. His subject was, "Communicable Diseases," and his paper was illustrated with colored slides.—A. M. French, M. D., Secretary.

* * * *

McDOWELL

Dr. James K. Morrow, of St. Albans Sanatorium Radford, Virginia, was the guest speaker at the regular monthly meeting of the McDowell County Medical Society, held February 14, at Welch. His subject was "Psychiatry in General Practice."

The speaker traced briefly the development of Psychiatry, mentioning and discussing the major psychoses, neuroses, and psychosomatic disorders. He made helpful suggestions concerning the treatment of the major psychiatric conditions.

At the business meeting following the scientific program, Dr. A. J. Villani reported on the Secretary-PR Conference, as well as the second annual Press-Radio Conference held in Charleston, January 28. He stated that in the Press-Radio Conference emphasis was placed upon the need for hospitals and physicians furnishing information to the newspapers and the radio concerning patients, particularly those being treated as the result of accidents.

Dr. Edward J. Reneke, of Jenkinjones, was elected a member of the Society.—Ray E. Burger, M. D., Secretary.

A BIG JOB

Public relations is a big job. It means selling your organization or group to the public as a whole—making the people realize that you have an essential and worthwhile service to perform. Good public relations is a big job. It takes money, personnel, and careful planning; but it all pays off in a stronger and more efficient organization.—W. Va. Farm News.

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JAMES R. BLOSS, M. D., Editor Emeritus, Huntington

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DUODENAL OBSTRUCTION IN THE NEWBORN

By J. O. RANKIN, M. D.,
Wheeling, W. Va.

Complete obstruction of the duodenum in the newborn is a fatal condition unless an early diagnosis is made and adequate surgery is instituted. It is therefore highly important that the physician who comes in contact with the newborn child be well versed in the knowledge of the symptomatology of this condition so that immediate action will be taken to establish a diagnosis and acquire the aid of an experienced surgeon.

Fortunately, the condition is rare but if one reviews the literature on the subject, he will be impressed by its relative frequency. Young and Mueller[1] have estimated its occurrence at one in twenty thousand. Calder[2], in 1773, first described this condition but it was not until 1916 that Ernst[3], of Copenhagen, reported the first case successfully treated by operation.

The obstructing mechanism may be intrinsic or extrinsic. Ladd and Gross[4] believe that the atresia is due to failure in transition of the solid cord to a hollow tube. Prior to the fifth week of fetal life the intestine presents a well defined lumen lined with epithelium. Soon after, the epithelium rapidly proliferates and the lumen of the intestine from the pylorus to the iliocecal valve becomes obliterated by epithelial concrescences. Thus, the formerly patent intestine passes through a solid stage for a short period. Later, vacuoles appear among these epithelial cells and coalescence of these cystic spaces re-establishes the intestinal lumen by the twelfth week. An arrest in development during the second or third month of fetal life results in either atresia or stenosis of the intestine.

Bland-Sutton[5] attributes the defect to the fact that it occurs, as do most developmental errors, at the site of a developmental junction; in this case where the foregut and midgut meet.

The intrinsic obstruction may therefore be a membranous diaphragm obstructing the lumen, a fibrous band, or cord connecting the bowel, or there may be several atresias in which the blind segments of bowel are joined together by a cord (like a string of sausages) and, finally, there may be no connection between the dilated proximal bowel and the distal collapsed portion.

The extrinsic causes may be classified as follows: (1) peritoneal bands, (2) adhesions, (3) anomalous blood vessels, (4) torsion and (5) volvulus.

CLINICAL FINDINGS

The first and most important symptom is vomiting. It usually begins after the first feeding and becomes progressively more pernicious. The vomitus may or may not be stained with bile, depending on the location of the obstruction which, as a rule, is distal to the ampulla of Vater; hence, the vomitus would be bile stained and the meconium would be acholic. Should there be complete duodenal atresia or obstruction at the ampulla, both the vomitus and meconium would be acholic and the patient would be jaundiced. Obstruction proximal to the ampulla would give an acholic vomitus with bile stained meconium.

As the vomiting progresses, it may become blood tinged.

The second symptom is constipation. While there may be an occasional passage of meconium, there will be no evidence of ingested food in it.

Another finding is dehydration, rapid and extreme from the loss of all ingested fluids. A palpable mass in the epigastrium which may disappear after vomiting, and persistalsis of the distended stomach and duodenum may be visible.

The findings in incomplete obstruction are quite different. Vomiting may be delayed for weeks and may be sporadic as a result of transient volvulus, or there may be temporary blocking of the duodenal lumen from other extrinsic causes.

ROENTGEN DIAGNOSIS

When the symptoms and signs suggest the probability of duodenal obstruction, confirmation by roentgen examination is indicated. These studies will supply the necessary information both as to the location and the degree of obstruction.

Routine abdominal films taken in various positions will demonstrate both fluid levels and gaseous distention of the stomach and duodenum. If the obstruction is due to an incomplete stenosis, small amounts of gas may be seen in the remainder of the intestinal tract. In cases of atresia there is a complete absence of any gas distal to the duodenum.

Inquiry should always be made as to whether or not an enema had been given prior to the examination, because air so introduced into the colon cannot be differentiated from ingested air and might lead to the erroneous conclusion of a patent intestinal tract.

When a contrast media is necessary for more definite conclusions, it is wise to inject a minimal amount of a thin solution of barium through a duodenal tube and then aspirate it as soon as the study is completed. If this is not done a stenosed duodenal lumen may be obstructed by the thick barium or the solution may be aspirated into the lungs, as the swallowing and coughing reflexes of these infants are rather immature.

The stomach and the pre-obstructed portion of the duodenum usually are greatly dilated and often will given an hour-glass appearance due to the contraction of the pyloric ring. Peristalsis may be diminished or absent if the organs are exhausted from overdistention.

The failure of the barium to pass beyond the duodenum at the end of six hours confirms the diagnosis of duodenal atresia. If the obstruction is incomplete some barium will always be seen in the intestines on the six hour film. These latter cases should have twenty-four and forty-eight hour films as well as barium enema to rule out other congenital changes.

Hypertrophic pyloric stenosis rarely occurs before the second or third week of life. Progress films invariably show some barium passing into the jejunum. Active peristalsis is easily seen in the stomach and a mass usually can be palpated at the pylorus.

TREATMENT

The treatment is surgical and this must be proceeded with just as soon as the patient can be rehabilitated physiologically by replacement of fluids, electrolytes and blood. The longer this is postponed the poorer will be the prognosis. The untreated patient usually will succumb in the first week of life although a few have lived to the age of ten or twelve days.

It is extremely important and helpful to the surgeon to have the association of an able pediatrician to direct the preoperative and postoperative care. Properly done, a worthy contribution is made toward lowering an exceedingly high mortality in these small and frail patients.

The stomach must be decompressed with a nasal tube and gastric suction prior to operation. This must also be maintained for two or three days after the operation to prevent distention of the stomach and duodenum, thereby protecting the integrity of the suture line of the anastomosis.

Glover and Barry[6] have suggested doing a gastrostomy at the time of operation. Two small rubber catheters are inserted through the stomach wall. The end of one remains in the stomach to provide suction, and the other is threaded several inches past the anastomosis to serve as a feeding tube. The catheters are anchored to both the stomach and abdominal walls with nonabsorbable suture material to prevent accidental removal.

Fluids can be introduced through the feeding tube as a slow drip, and within a day or two the infant's nutritional requirements will be met. While I have not used this method, it certainly would seem to have merit.

We prefer drop ether as an anesthesia, administered by a capable anesthetist. The patient should have all four extremities immobilized on a suitable board. Body heat should be conserved by proper protection and a warm water bottle under the patient's back.

A right rectus incision gives excellent exposure, but some care must be exercised to prevent wound contamination from the umbilical cord.

As there frequently are other coexisting anomalies, it is our practice to pass a catheter into the rectum preoperatively to insure its patency. At operation the intestinal tract is explored from the ligament of Treitz to the rectosigmoid. If this is normal, the corrective surgery is proceeded with.

Duodenal obstruction due to extrinsic causes must be dealt with according to the needs of the individual case. In some cases abnormal bands or adhesions may be severed to release the obstruction. Those due to mesenteric vessels or intrinsic atresias will require some type of anastomosis, namely, anterior or posterior gastroenterostomy or duodeno-enterostomy. The latter method probably is superior to the others because it affords better drainage of the obstructed duodenal pouch and prevents regurgitation of the bile and pancreatic secretions into the stomach.

The actual anastomosis presents definite technical difficulties. The proximal bowel is dilated, the wall is thin and friable, and the intestine distal to the obstruction is smaller than an ordinary lead pencil, necessitating considerable skill in placing two rows of sutures without obliterating the intestinal lumen. In some cases only one row is possible. The small caliber of the distal intestine requires that the anastomosis be of the side-to-side type.

The closure of the abdominal wound should be done with care. Accurate layer closure with nonabsorbable suture material is desirable. This will decrease the incidence of wound disruption, a likely complication because of the patient's state of malnutrition.

PROGNOSIS

A review of the literature reveals an astoundingly high mortality rate in the cases that have been reported. Many of the patients are doomed because of other coexistent anomalies. A close cooperation between obstetrician, pediatrician, roentgenologist and surgeon will materially contribute to lowering this incidence by early recognition of the condition and the immediate institution of the proper surgical procedure.

CASE REPORTS

While it has been the author's privilege to operate on several of these cases during the past twenty-five years, the five cases reported in this series are ones that we have encountered during the past year.

I recently saw one of the first cases that I operated on. He is a normal adult male, married, and has one child.

Case 1.—C.W. (W.C. 129803), a four day old white male, was admitted to the Ohio Valley General Hospital Feb. 8, 1949, following a normal delivery at the New Martinsville Hospital. The history was to the effect that all ingested material had been vomited since birth.

General inspection revealed the patient to be a fairly well developed, poorly nourished, dehydrated white male infant with rapid and deep respirations. The skin was dry and lacked turgor. There was a moderate cyanosis. There was some distention of the upper abdomen. The umbilical cord showed some evidence of infection. Otherwise the general physical examination was within normal limits. The patient's vomitus was bile-stained. The weight was five pounds, fifteen ounces, and the temperature was 102.8 F. by rectum. The hemoglobin was 66.9%; the red blood cell count was 3,500,000, and the white blood cell count was 12,400. The CO_2 combining power was 30 volumes per hundred cc's. The Mazzini test was negative. Blood cultures the following day were positive for Staphylococcus albus. The patient was type B Rh negative, and the urine analysis was normal except for a trace of albumin.

Roentgenologic examination Feb. 9, 1949 revealed complete intestinal obstruction of the third portion of the duodenum. There was also some infiltration in the upper and middle right lung fields and slight perihilar infiltration on the left.

Preoperatively, the patient was given penicillin infusions of water base and electrolytes and whole blood. Continuous gastric suction was used after the roentgenologic studies were completed.

Laparotomy was performed under ether anesthesia February 10, 1949. The stomach and duodenum were dilated. The intestinal tract distal to the ligament of Treitz was normal throughout but completely collapsed. Anterior gastrojejunostomy was performed, using two rows of sutures. The abdomen was closed in layers with cotton suture material. The patient left the table in fair condition.

Postoperatively the patient did fairly well. Constant gastric suction was used for three days. The fluid intake was maintained by the use of whole blood, infusions of water and electrolytes. Penicillin was given daily. The patient received

oxygen therapy because of recurring periods of cyanosis and dyspnea.

On removal of the gastric tube, oral feedings were instituted and the patient's general condition seemed to improve for a period of five days. Then he began to show increasing evidence of pulmonary pathology. Roentgenologic examination February 21, 1949 revealed partial atelectasis of the right lung and bilateral pneumonic changes. Episodes of vomiting ensued with persistance of the pulmonary symptoms. The patient lost ground rapidly and expired February 23, 1949.

Postmortem examination revealed complete compression of the third portion of the duodenum by the superior mesenteric vessels. The gastrojejunostomy was functioning and intact. The remaining intestinal tract was normal. There was bilateral bronchopneumonia with multiple small abscesses of the right lung.

COMMENT

This is a case of extrensic obstruction caused by the superior mesenteric vessels. Death was due to bilateral bronchopneumonia and multiple abscesses in the right lung which, as is true in the case of many of these infants, is caused by aspiration of vomitus. This patient was cyanosed on admission to the hospital and continued to be so until death.

Case 2.—S.D. (W.C. 129943), a seven day old white female, was admitted to the Ohio Valley General Hospital February 14, 1949. There was a history of persistent vomiting since birth. This was described as bile-stained in character and projectile in type. There had been a few small bowel movements.

General inspections revealed the patient to be an acutely ill, fairly well developed, poorly nourished, dehydrated white female weighing five pounds, six ounces. The rectal temperature was 102.6 F. The skin was dry and lacked its normal turgor. The upper abdomen was moderately distended and peristalic waves were noted extending from left to right in this region. The remaining physical examination was within normal limits.

The patient's hemoglobin on admission was 85%; the red blood cell count was 4,400.000, and the white blood cell count was 11,000. The urinalysis was negative. The patient was type B, Rh negative. The Mazzini test was negative.

Roentgenologic examination February 15, 1949 revealed an obstruction in the transverse duodenum which was markedly dilated with no barium passing beyond this point, but gas shadows were noted in the intestinal tract distal to the obstruction.

The state of dehydration was treated preoperatively with infusions of water and electrolytes. A nasal tube was inserted for gastric suction. Laparotomy was performed February 16, 1949. The stomach was normal. The duodenum was markedly dilated. The intestinal tract distal to the ligament of Treitz was partially collapsed but was otherwise normal.

Anterior gastrojejunostomy was performed, using two rows of suture material. The abdomen was closed in layers with cotton suture material. Postoperatively the patient received supportive therapy in the form of whole blood, electrolytes, water and penicillin. Oxygen was given for a few days and continuous gastric suction for two days. Oral feedings were then instituted which were well tolerated. The abdominal wound healed by first intention. The patient's convalescence was uneventful. She was discharged February 28, 1949, two weeks from the time of admission to the hospital.

COMMENT

This is a case of extrinsic obstruction. We did not ascertain the exact cause at the time of operation but it was unquestionably incomplete because the intestines distal to the ligament of Treitz were only partially collapsed. There had been a few bowel movements prior to admission, although it was not known whether or not they contained bile. The barium did not pass beyond the duodenum but there were gas shadows in the distal intestinal tract.

Case 3.—C.M.W. (W.C. 136330), a three day old white female, was admitted to the Ohio Valley General Hospital January 19, 1950, following a normal delivery at the Gill Memorial Hospital at Steubenville, Ohio. She weighed six pounds at birth. Nothing was given by mouth the first day after birth. On the second day the child was put to the breast every three hours and given a supplementary formula of two ounces at each feeding. At midday the mother noticed that the child was vomiting a green-colored vomitus. All feedings were stopped but the vomiting continued. Small infusions were given through the scalp veins. Meconium was noted once on January 18, 1950. A diagnosis of intestinal obstruction was made and the patent was transferred to the Ohio Valley General Hospital for treatment.

On admission the child weighed five pounds, seven ounces, and had a temperature of 99.4 F. by rectum. With the exception of a mild state of dehydration, a few moist rales in both lungs, and moderate distention of the epigastrium, the general physical examination was negative.

The hemoglobin was 74%. The red blood cell count was 5,300,000, and the white blood cell count was 3,100. The Mazzini test was negative. The urinalysis was negative. The patient had type O, Rh positive blood.

Following the entrance physical examination, a rectal thermometer was inserted half its length into the rectum. On withdrawal there was a large passage of a sticky brown stool containing milk curd. A second passage soon followed the first.

It was noted that any fluid given by mouth was immediately vomited and was bile stained. Gastric suction was started and fluids administered as infusions of Ringer lactate solutions every eight hours.

Roentgenologic examination the day after admission revealed a complete obstruction at the second portion of the duodenum. There was no evidence of gas in the small intestines but there were a few shadows in the descending colon.

On January 21, 1950, under ether anesthesia, the abdomen was opened through a right rectus incision. The duodenum was found to be markedly dilated and seemed to end as a blind pouch at the end of the second portion, but on further examination it was found to continue as a very small tube as far as it could be traced. The remainder of the intestinal tract was normal in appearance and position but was completely collapsed. Anterior gastrojejunostomy was performed, using two rows of suture material. The abdomen was closed in layers with cotton suture material. Due to difficulty in keeping the umbilical cord (which was grossly infected) isolated from the lower end of the operative wound, it was felt there was considerable danger of an infected wound.

Postoperatively the patient was treated with continuous gastric aspirations with Wangenstcen suction, infusions of electrolytes, transfusions of whole blood and penicillin.

Following removal of the indwelling gastric tube on the third postoperative day, the patient had intermittent episodes of vomiting. These progressed and became more frequent and on the eleventh postoperative day a diagnosis of intestinal obstruction was made and a second operation was performed. An obstruction about three inches beyond the site of the original anastomosis was noted as were a number of obstructions throughout the small bowel apparently due to lowgrade peritonitis.

Although the gastrojejunostomy seemed to be functioning, duodenojejunostomy was performed between the second portion of the duodenum and the jejunum, distal to the anastomosis. Following the second operation the patient was treated with gastric suction for two days and was given supportive therapy in the form of electrolyte infusions, whole blood transfusions and penicillin. On removal of the indwelling gastric tube the patient took her feedings well; she gained weight and made an uneventful recovery except for a wound infection which cleared and was healed at the time of discharge, March 7, 1950. There had been a weight gain of two pounds from the date of the admission.

COMMENT

This is a case of intrinsic but not complete obstruction. This was evidenced by finding a small tube instead of a cord in the third portion of the duodenum, gas shadows in the descending colon on roentgen examination, and milk curds in the stool on admission.

It is quite possible that the lowgrade peritonitis and intestinal obstruction were the result of contamination of the operative wound from the grossly infected umbilical cord. This might have been avoided had a transverse incision been used.

Case 4.—C. J. C. (W. C. 137376), a three day old female, was admitted to the Ohio Valley General Hospital January 20, 1950, following a normal delivery in the home. According to the father, the respirations immediately after birth were quite slow and labored and some time was spent in resuscitating the infant. It was also noted that the child at no time retained water or breast milk. There were no bowel movements. On the morning of the third day it was noted that the baby was jaundiced and that there was blood in the vomitus. She was taken to a neighboring hospital where she was given infusions of water and electrolytes, and a diagnosis of intestinal obstruction was made. The evening of the third day she was referred to this hospital for surgical care.

On admission the child weighed four pounds, twelve ounces, and the temperature was normal. Physical examination revealed the patient to be fairly well developed but actutely ill. The skin was dry, wrinkled and deeply jaundiced. There

were suggestive Mongoloid features. There was moderate cyanosis of the mucous membranes and nail beds. The heart rate was rapid. There was a harsh systolic murmur heard over the entire precordium. The epigastrium was distended but the lower abdomen was flat. On giving the child one and one-half ounces of water, active peristalsis was seen in the epigastrium, moving from the left upper quadrant to the umbilicus, after which the child vomited a large amount of tarry bile stained fluid.

A small rubber catheter was introduced into the stomach and continuous Wagensteen suction was instituted. The patient was given 50 cc's of Ringers lactate solution and 10 mg. of vitamin K.

As the child was dangerously ill, jaundiced, and vomiting blood, further diagnostic studies were omitted and surgical intervention proceeded with. Under ether anesthesia the abdomen was opened through a right rectus incision. The stomach and first and second portions of the duodenum were dilated. The duodenum ended here as a blind pouch. The jejunum began as a blind pouch near the iliocecal valve. The remainder of the intestinal tract was normal but completely collapsed. Posterior gastrojejunostomy was performed, using two rows of sutures for the anastomosis. The abdomen was closed in layers with cotton suture material. The patient left the table looking somewhat better than at the beginning of the operation.

Postoperatively the patient received oxygen, whole blood, fluid infusions, vitamin K and penicillin. Gastric suction was continued for three days after which a formula was started by mouth. The jaundice cleared in four or five days. The convalescence was uneventful and the patient was discharged February 10, 1950, or three weeks after admission, with a weight gain of two pounds.

COMMENT

This is a case of intrinsic obstruction with absence of the third and fourth portions of the duodenum and a portion of the proximal jejunum. Unquestionably, early diagnosis and operation saved this child's life because it was already deeply jaundiced and was vomiting blood. This child had other anomalies as often occurs in these patients, namely, a congenital heart lesion and suggestive Mongoloid features.

Case 5.—E. S. (W. C. 137902), a three day old white female, was admitted to the Wheeling Hospital April 10, 1950, following a normal delivery at New Martinsville, West Virginia. The birth weight was five pounds, ten ounces. The baby was started on breast feedings eight hours after birth and immediately started to vomit and continued to do so until the time of admission to the hospital. The vomitus became bile stained and was projectile in type. There had been no bowel movements. During the preceding twenty-four hours the child had become rather deeply jaundiced.

The admission examination revealed that the patient was deeply jaundiced. The skin was dry and wrinkled from dehydration. The temperature was 103 F. The mucous membrane and nail beds were cyanosed. The patient weighed four pounds, seven ounces. The upper half of the abdomen was distended with peristaltic waves moving from the right to the upper left abdomen. The liver margin was palpable three fingerbreadths below the costal cage. It was noted that a thermometer could be introduced only about one and one-half inches into the rectum.

The CO_2 combining power was 38 volumes per hundred cc's. The red blood cell count was 3,650,000; the hemoglobin was 75%; the white blood cell count was 9,000; the urinalysis was negative. Roentgenologic examination revealed complete obstruction in the transverse duodenum which was markedly dilated.

Preoperatively the patient was treated with infusions of Ringer's lactate solution, whole blood, vitamin K, continuous gastric suction and oxygen. On April 12, 1950, under ether anesthesia, the abdomen was opened through a right rectus incision. There was considerable enlargement of the liver. The stomach and first and second portions of the duodenum were markedly dilated. The third and fourth portions were not observed. The remainder of the intestinal tract down to the rectosigmoid was normally developed and in normal position, but completely collapsed. Prior to operation a small catheter had been passed into the rectum with considerable difficulty so that there was apparently some stenosis of the rectal lumen. Duodenojejunostomy was performed, using two rows of sutures to complete the anastomosis. The abdomen was closed in layers with cotton suture material. Although the patient stopped breathing once on the table, she was in fair condition at the completion of the operation.

Postoperatively the patient's convalescence was quite stormy. Irregular respirations and cyanosis necessitated almost constant oxygen therapy. Considerable difficulty was encountered in finding veins for giving adequate blood, fluids and electrolytes.

Gastric suction was discontinued on the third day and oral feedings instituted. While most of the fluid intake was retained, there were sporadic

episodes of vomiting during the next ten days. Bile stained bowel movements occurred at intervals. The patient's jaundice gradually disappeared.

On the fourteenth postoperative day (April 26, 1950) all ingested materials were vomited. Roentgenologic examination revealed that the barium did not pass beyond the anastomosis. The patient was again prepared for operation and was explored that evening under ether anesthesia. A loop of jejunum four inches distal to the anastomosis was found adherent to the undersurface of the liver, causing the obstruction. On freeing this, gas passed freely into the adjacent intestine. In spite of the fact that the patient seemed to tolerate the operation well, the general course was downward and death ensued twenty-four hours later. Unfortunately, permission for an autopsy was not obtained.

COMMENT

This probably is a case of extrinsic obstruction. Although the first and second portions of the duodenum were markedly dilated, the third and fourth portions could not be observed. It was evident at operation that nothing passed beyond the ligament of Treitz.

There was unquestionably a certain amount of stenosis of the rectum. The constant cyanosis would seem to indicate the possibility of some congenital anomaly of either the heart or lungs.

While jejunal obstruction did develop in this case, the second operation revealed that the anastomosis and intestinal tract had been functioning.

SUMMARY

1. Vomiting, dehydration and constipation in the newborn, with a distended mass in the epigastrium and a flat hypogastrium should lead the physician to suspect the true diagnosis.

2. Roentgen examination will reveal a dilated stomach and proximal duodenum, with failure of barium to pass into the jejunum at the end of six hours. Intestinal gas patterns will be absent if the obstruction is complete.

3. Proper preoperative and postoperative care with replacement of fluids, electrolytes and blood, and the use of antibiotics will definitely influence the mortality rate.

4. Early diagnosis is imperative.

5. The treatment is surgical.

6. Five cases of duodenal obstruction in the newborn that have been treated by us during the past year are reported in detail.

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THERAPEUTIC VALUE OF GARDENING

Real doctors have always been "menders of distressed lives," and garden making has always been a favorite prescription for the pacification of man's inner conflicts. There seems to be a healing influence in every small plot of earth. There energy for the body germinates; there grief is stilled; and there irritation and fatigue vanish. Patients who indulge in horticulture enthusiastically say: "I sleep better;" "I eat better;" "I actually am rested by the work."

It is to be remembered that gardeners are rewarded with the health-giving balm of sunlight and fresh air, as well as the benefits of physical exercise and the satisfaction of creative achievement. It has been observed that as a man works in his garden his tensions leave off. Gardening also affords stimulation of the mind, for as the patient merely watches things grow, he experiences a sensation of usefulness in production.

The mere spading of a plot seems to banish worry. Gardening clears the mind of many a cloud and rids the body of many an ill. Few things there are that can restore Man's faith more effectively than witnessing a plant bursting into beautiful flower, or a once cold, dead-looking bulb being transformed into a brilliant blossom.

Whether the garden be only a few potted flowers gracing the window sill, or an extensive area devoted to truck, it will furnish a therapeutic value by its constant unfolding of new delights.—Orin R. Yost, M.D., in J. So. Med. and Surg.

PREVENTIVE GERIATRICS

A large percentage of illnesses in old age is of an ambulatory nature; only one in a hundred patients needs institutional care. The problem is how to treat these aged people to keep them out of hospitals. This is the role of preventive geriatrics.

A preventive program includes mental hygiene, psychotherapy, care of focal infection, and adequate nutrition. Physical therapy for hemiplegia is needed. Early ambulation is necessary after any illness and after surgery. Adequate proteins, calcium and vitamin C are the main features of an adequate diet. Overeating should be avoided, especially at the evening meal. Obesity is always a danger. Preventive geriatrics begins at 20; actual geriatrics begins at 40. The term geriatrics covers the causes of aging; also prevention and treatment of diseases of advancing years.—Malford Thewlis, M.D., and E. T. Gale, M.D., in Geriatrics.

HISTOPLASMOSIS

By HERMAN FISCHER, M. D., A. ROBERT MARKS, M. D., JAMES E. WILSON, M. D., and RAYMOND HATHAWAY, Clarksburg, W. Va.

One hundred sixteen cases of Histoplasmosis have been reported in the literature since its description in 1906 by Darling,[1] who thought the causative organism to be a protozoon. The true nature of the organism was suspected by DaRocha-Lima[2] but it wasn't until 1932 that De Monbreum[3] was able to culture it from the spleen.

Histoplasma capsulatum is a yeastlike fungus seen in round and oval forms measuring 1 to 5 microns in diameter. Typically, it consists of an irregular chromatin mass situated near its center or eccentrically, a clear zone in its widest portion, and a sharply defined achromatic capsule. Most common dyes will stain it. It is weekly gram-positive and slightly acid fast. Although it will grow easily on most common culture media, contamination is a difficult problem. In our laboratory we have found the method of Weed and Parkhill[20] to be the most satisfactory to culture a pure strain. This simply consists of adding 50 units each of penicillin and streptomycin to each cc of blood agar. In culture it presents a white wooly appearance that becomes granular and slightly yellow with age. Dowding[4] and others have described the yeastlike form that occurs when cultured at 37°C. and the mycelial form when grown at room temperature. It is our experience when first cultured at 37°C. and transferred to room temperature at a later date, it first forms a round smooth spore and later this becomes a typical chalamydospore; this transition takes at least two months. However, when grown directly at room temperature, we obtained the typical spore in two weeks. Although the literature mentions that months are usually required for luxuriant growth, we were fortunate in obtaining growth in two and three days when incubated at 37°C. Most laboratory animals can be infected. In our case, the rabbit proved susceptible and died in six days. From material taken at autopsy, we were able to demonstrate the organisms both histologically and bacteriologically.

The disease is world wide.[14] It has been reported in Central, South, and North America, Europe, the Philippines, Java and Africa. In this country it has been described in Minnesota, California, Iowa, Tennessee, Ohio, Missouri, Mississippi, Maryland, Virginia, Kentucky, Michigan, Florida, Indiana, Alabama, Texas, Illinois, Washington D. C., Oklahoma, Louisianna, New York, and North Carolina. To our knowledge, this is the first reported case in West Virginia.

All ages are affected,[14] although a greater proportion appear in the first decade of life, particularly in the first year. Then the incidence falls until the age of 40 when it again rises so that from 40 to 70 it reaches almost the childhood level.

A variety of symptoms[14] and signs may be found. A rough order of frequency is as follows: irregular fever suggestive of sepsis, hepatomegaly, splenomegaly, generalized lymphadenopathy especially cervical adenopathy, diarrhea, rales, pneumonia, vomiting, cough, and sore throat. Other, and rarer symptoms and findings are axillary and inguinal adenopathy, dyspnea, ascites, tumor formation, anal fissures, hemorrhoids, ulcers, melena, anorexia, and hiccup.

There is usually a moderate to severe anemia. Often, a leukopenia is present. The differential count is not remarkable, although on occasions a lymphocytosis or monocytosis is encountered. Many cases show a lowering of the blood proteins with a reversal of the A/G ratio. A high percentage of cases show albuminuria accompanied by casts and red blood cells. The disease may be discovered by finding the organism in the mononuclear cells of the blood, or in cultures of blood,[7,10] urine, feces, throat, sputum, skin, and duodenal drainage. Biopsy of a lymph node is the most valuable method of diagnosis although many investigators prefer sternal puncture. A skin test may be used but the reliability of the reaction has not yet been fully determined. Most authorities believe, however, that this skin test is valuable and the results obtained from it are comparable to those of the tuberculin test. Fatal cases in infants, like a few cases of miliary tuberculosis, may give a negative skin test. The older,[6, 10] latent subclinical cases will give a positive skin test. X-ray may reveal calcified nodules in the lung fields. Much like the Ghon[10] tubercle in tuberculosis, these calcified nodules represent healed lesions. Apparently, many authors believe that a considerable percentage of calcified lung lesions represent healed lesions of histoplasmosis rather than tuberculosis. [12, 15, 18] A complement fixation test devised by the United States Public Health Service has been reported as positive in all but one case of proven histoplasmosis. Another experimenter, making use of Cavelti's celloidin suspension obtained positive results on experimental rabbits.[17] Most cases, however, are diagnosed at autopsy.

The early pathologic lesions consist of isolated macrophages[9] filled with the organisms. Later, the involved organs show areas of necrosis surrounded by granulomatous tissue. In the late stages, the necrotic portions or areas are replaced by fibrous and hyaline material.

Most commonly, the body shows a widespread invasion which is to be expected since the reticulo-endothelial cells are widespread and the apparent predilection of the organisms is for these cells. Usually involved are the spleen,[14] liver, visceral lymph nodes, lungs, bone marrow, mouth, gastro-intestinal tract, peripheral lymph nodes, kidneys, larynx, and adrenals. The latter involvement may result in adrenal insufficiency.[16]

The portal of entry is not known.[9] Most often implicated is the oral route, although the skin, respiratory tract, and even personal contact have been suspected.

The disease must be differentiated[9] from Hodgkin's disease, lymphosarcoma, tuberculous lymphadenitis, kala-azar, syphilis, cancer, other fungus infections, amebic and bacillary dysentery, ulcerative colitis, leukemia, and infectious mononucleosis.

All therapy has failed. The measures tried have been blood transfusions, neostam, potassium arsenite, neoarsphenamine, sulfarsphenamine, acetarson, sulfanilamide, sulfaguanidine, sulfadiazine, sodium thiosulfate, iodides, ionized metals, thymol, bone marrow extracts, autogenous vaccines, antimony and potassium tartrate, stobophen, quinine and quinacrine hydrochloride, and penicillin. X-ray therapy and amputation are other unsuccessful methods of therapy.

CASE REPORT

Patient was a white female child, age 21 months, first admitted to the hospital on October 10, 1949. For three weeks prior to this admission she had intermittant diarrhea and severe dysuria. For the past week the stools were frequent, loose, with a foul ordor, and she had refused food. For four days she had a spiking fever and had been able to void urine only when the bladder was distened. The urine had a foul odor. A history of a sore mouth at the age of one month was obtained.

Laboratory examinations done at this time were reported as follows: RBC—3,900,000; hemoglobin-lograms; WBC—10,900; lymphocytes —44%; segmented neutrophils—44%; stab forms—8%; eosinophils—1%; myelocytes—1%. Urine was acid, with a trace of albumin, 15 to 20 WBC per HPF. One other urine was negative while still another had a trace of albumin. On bed rest, Citrosulfa and Hemocibrin, she improved and was discharged on October 16, 1949.

On the second admission, which was on October 25, 1949, she still "held herself back while voiding" but there was no dysuria. Prior to this admission she had gone 10 hours without voiding urine and when her urine was examined at the physician's office it had a specific gravity of 1.018; Ph 7.5; albumin—one plus; 10 WBC HPF. Physicial examination at this admission revealed a thin female child with poor muscle tone, moderately enlarged anterior and posterior cervical lymph nodes, and both the liver and spleen were palpated two fingers below the costal margin. Temperature was 103.4 F. The stools were normal. Hemoglobin varied from 9.5 to 15 grams, RBC—3,350,000 to 5,120,000, WBC 6,900 to 11,100 monocytes 2 to 10%, lymphocytes 17 to 49%, segmented neutrophils 33 to 64% with 9 to 17% stab forms. During this time blood transfusions were given which accounts for the changes in the blood. Other hematological studies were reported as; MCH—27 micromicrogram; MCHC—29.1; Hematocrit—31; MCV—91 cubic microns. The admission urine showed many WBC and the culture was positive for E. coli, Alk, fecalis and staphylococci but the urine cleared rapidly on therapy. Febrile agglutinations, agglutinations for undulant fever and Typhus, all were reported as negative. Also tuberculin skin tests and repeated blood cultures were negative. Blood chemistry gave the following results: NPN—31.5 mgms. %; serum albumin —2.26 gms. %; globulin—1.17 gms. %; total proteins 3.43 gms. %. On October 31, 1949 the retrograde pyelogram was negative. Chest X-rays showed changes throught to be consistent with chronic fibrosis. A lymph node biopsy was

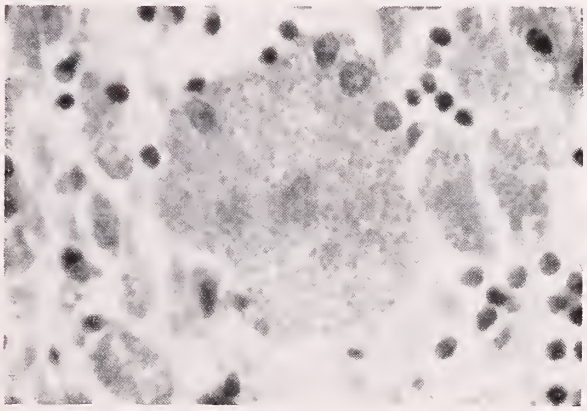

Fig. 6 Magnification 980X H&E. Unusual mononuclear cell with hordes of H. capsulatum.

performed and the interpretation was Histoplasmosis. Cultures of stool, blood, urine and the throat were taken and a fungus was isolated. Blood was sent to the U. S. Public Health for a Histoplasmosis complement fixation which was reported positive in a titre of 32. Antigen for the skin test did not arrive before death.

Her clinical course was steadily downhill with a loss of weight from 20 to 18 lbs. The temperature curve was of the spiked septic type. Treatment consisted of aspirin, citrasulfa, streptomycin, atropin, crystacillin, aureomycin, and Kaopectate. Despite all therapy the patient died on December 25, 1949, two months after the second admission.

AUTOPSY

The autopsy was unfortunately limited to the thorax and abdomen. Inspection of the body revealed a thin female child, approximately 2 yrs.

Fig. 1. Mass of mesenteric lymph nodes.

old; weight 18 lbs.; height 27 inches. Many nodes were palpated in the cervical, axillary and inguinal regions. Most of these were movable but many were fixed. The abdomen was distended and approximately 50 cc of gray white fluid was present in the peritoneal cavity. All the mesenteric and mediastinal lymph glands were enlarged and matted together; they were whitish and many had caseous centers. The mass of glands in the abdomen measured 10 cms in diameter. The stomach was dilated as were the loops of small intestine. A fine fibrinous exudate was present over the surface of the small intestines. The liver extended 6 cm below the costal margin and the spleen extended 2 cm below the costal margin. The lungs and heart were not remarkable.

The liver weighed 430 grams. It had a pasty pale color and was rubbery. No gross lesions were noted. The spleen weighed 85 grams and

Fig. 2. Ulcers of ileum.

was light purple in color flecked with white specks. On cut sections the corpuscles were prominent but definite pathologic lesions could not be demonstrated. The pancreas including both the head and tail was surrounded by enlarged lymph nodes which made it difficult to dissect this organ free. In many areas there were caseated areas continuous with the surrounding nodes. Each kidney weighed 38 grams and was not remarkable except the cortex was a dense yellow color.

The rugae of the gastro-intestinal tract were flattened or absent. In the wall of the intestines were many small dome-shaped elevations with small umbilicated centers. In general the involved segments of the intestine were not thickened but there was an occasional thickened area 1 to 5 mm in diameter without a definite location or arrangement. Forty-two cms below the pylorus there was a perforation but the edges were not remarkable and it may have been an artefact. In the jejunum these ulcers were numerous and tended to spread around or encircle the lumen and the edges were slightly undermined. The serosa was partly covered by patches of a fibrinous exudate with puckered whitish

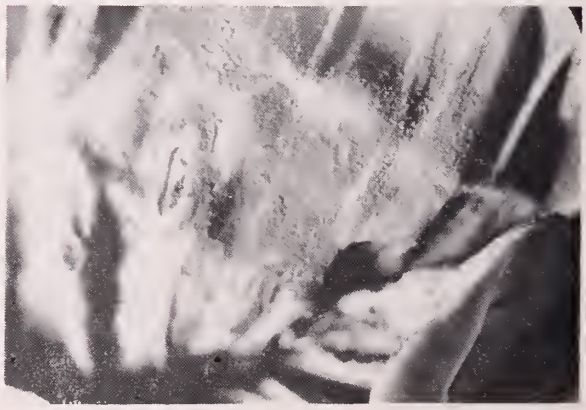

Fig. 3. Ulcer of colon.

scarred areas. Beneath these scarred areas there were numerous ulcers at or near the mesenteric attachment. In these areas the wall was thinner than elsewhere with a loss of rugae. In the ileum the ulcers were larger and more circular with considerable cheesy material in the bases. Fifty eight cms. above the ileocecal junction there was another perforated ulcer with ragged edges. Other ulcers at the ileocecal junction were large up to 3 cms in diameter, some of which had paper thin bases. One such ulcer measured 3x2x1 cm. with an enlarged lymph node attached to the serosa. Many ulcers and scarred areas were noted in the cecum tending to encircle it. Many ulcers were present in the colon and tended to be large and circular. Ulcers were also present in the rectum and anus, some of those in the rectum were hemorrhagic. A few of these were thinned and perforated.

The adrenal glands were replaced almost completely by miliary white tumor nodules up to 5 mm in diameter. Some of these nodules had caseous centers. The urinary bladder was not

Fig. 4. Perforation through ileum (probe is pushed through the opening).

remarkable. The bone marrow was not inspected.

On microscopic examination the interstitial tissue of the lungs were packed with large mononuclear cells containing large vesicular nuclei that occupied about one third of the cell and usually the cytoplasm was foamy. Many of these cells were filled with organisms to be described later. Scattered among these cells were moderate numbers of polymorphonuclear leukocytes, lymphocytes and an occasional giant cell of the Langhan's type; the latter did not contain the organisms. Many small and medium sized capillaries were found in this interstitial tissue, a few of which contained infected mononuclear cells. Aside from an occasional one, the mononuclear

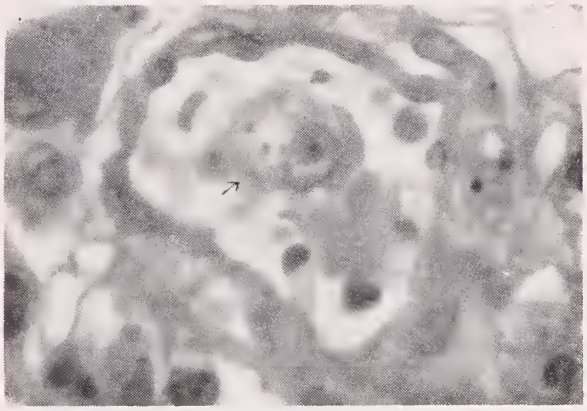

Fig. 7 Magnification 1250X H&E. Capillary containing infected mononuclear within the lumen (see arrow).

cells in the arterioles did not contain the organisms but the endothelial lining of the arterioles showed proliferation. In a few areas the swollen cells lining the alveoli contain the organism. An

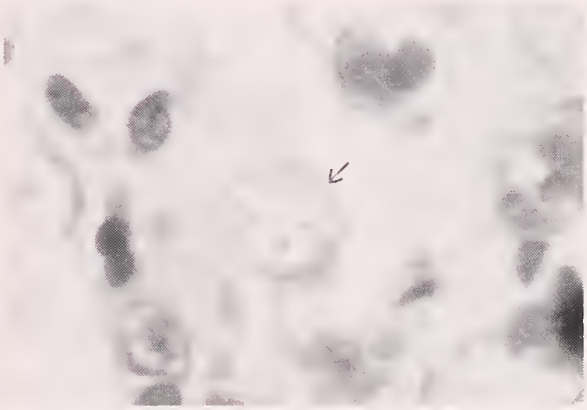

Fig. 8 Manification 1250X H&E. Organism within cell lining the lung alveolus (see arrow).

occasional club shaped tuft projected into an alveolus. This spur or projection was composed of mononuclear cells filled with organisms, neutrophils, lymphocytes, a few capillaries, covered in part by endothelial cells. An occasional cluster

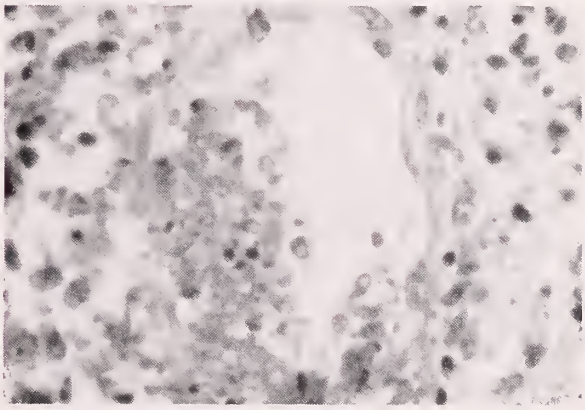

Fig. 5 Magnification 450X H&E. Venule in lung with eccentric bulging of endothelium.

of infected mononuclear cells were seen plugging the lymphatics. In a few places there was an occasional eccentric bulging of a capillary filled with a small mass of infected mononuclear cells and erythrocytes outside of which there was an intact endothelial lining. Nothing remarkable was recognized in the sections of the heart.

The sections from the duodenum revealed a dome-like elevation of the mucosa produced by a mass of inflammatory debris in the submucosa which has extended through the overlying mucosa to produce ulceration. This inflammatory debris consisted of a meshwork of fibrin in which there are countless numbers of mononuclear cells filled with the organism. Around this inflammatory debris there were lymphocytes, plasma cells, and a rare polymorphonuclear leukocyte. Two small nodular collections of a similar inflammatory debris were present in the tissue nearby. The muscularis was not involved and Brunner's glands as well as the muscularis mucosa could be recognized. The jejunum and ileum presented a picture similar to that of the duodenum. That of the colon differed, in that the inflammatory reaction had extended through the muscularis and was continuous with a similar reaction and necrosis of a lymph node on the serosa.

The Kupfer cells of the liver were swollen with the organism in the cytoplasm of these cells. Approximately 90% of the parenchymal cells contained medium sized vacuoles and an occasional yellow-brown granule.

The splenic architecture was completely disrupted with only a rare recognizable Malpigian corpuscle. The interstitial tissue was heavily infiltrated by mononuclear cells containing the organism. In many areas the cells lining the sinusoids of the spleen were swollen and contained the organism. The pancreas exhibited one medium sized lymph channel which was almost completely filled by a mass of infected mononuclear cells. These cells were enmeshed in a fibrin network. In another larger lymph channel, the infected mononuclear extended through the wall out into the surrounding connective tissue.

In the reticular layer of the adrenal there were tubercle like areas consisting of large central areas of necrosis of pink staining necrotic material in which the shadows of the cells could be seen. These necrotic areas were surrounded by a thin rim of epithelioid cells and outside of this a thick layer of large infected mononuclear cells. Many lymphocytes and a few polymorphonuclear leukocytes were found among these mononuclear cells. Outside the adrenal gland, there was a small collection of infected mononuclear cells.

The epithelium lining of the proximal convoluted tubules of the kidneys showed a granular cytoplasm. An occasional mononuclear cell containing the organism was found in the interstitial tissue and in the glomeruli near the endothelial lining of the capillaries. Since the endothelium is intact, they probably did not originate in the capillary wall. A few wedge-shaped areas infiltrated by lymphocytes were present in the cortex. An occasional lymphocyte was seen in the sub-epithelial layers of the urinary bladder which otherwise was not remarkable.

The architecture of the lymph nodes was almost completely obliterated by areas of caseation necrosis and large sheets of infected mononuclear cells. A few small patches of lymphocytes were noted without recognizable follicles. For the most part the infected mononuclear cells were in the interstitial tissues of the lymph node and were probably derived from the reticular cells. Although an occasional infected cell was seen in the sinusoids, the lining cells of the sinusoids was not remarkable. These infected cells were very large and, although not accurately measured, they were about ten times the size of a mature lymphocyte. The nucleus was vesicular, round to oval, irregular, took a light purple stain with hemotoxylin and eosin, and occupied about 25% of the cell. The cytoplasm was abundant, foamy, with a delicate shade of purple, and contained many organisms. Counts were made of the organisms within these cells and ranged from 15 to 500 plus. These organisms were 3-5 microns in diameter, the smaller ones predominating. They had a central dark spot surrounded by a thin halo bounded by a delicate but clear cut capsule or membrane. Occasionally the dark spot was eccentric and the organism resembled a minature signet ring cell. None of the organisms were extracellular. In some areas, tubercle-like areas were noted which were similar to those noted in the adrenal gland.

The blood culture taken at autopsy was contaminated; cultures of the lymph nodes showed histoplasma capsulatum. This culture was incubated at 20° C for 26 days and revealed the typical tuberculated chalamydospore of Histoplasma capsulatum. Antemortem cultures of the blood, stool, urine and throat were made. The stool cultures were made by emulsifying a small portion of feces in saline, treated 8 minutes with 6.0% sulfuric acid, neutralized with 5 N. sodium hydroxide, treated with an excess of penicillin and streptomycin for 30 minutes, and planted on Endo's, Sabouraud's, and blood agar media. At 37° C, the typical yeast form was

grown in 5 days. At 20°C, the same form was noted in 5 weeks.

The throat culture was planted on the Weed and Parkhill type of media using Endo's, Sabouraud's, and blood agar media. After 4 days incubation at 37°C this showed the yeast forms. One colony was emulsified in normal saline and injected in the ear vein and groin of a rabbit. Six days later the animal died. Autopsy revealed miliary lesions of the kidneys, heart, liver and spleen which were proved both bacteriologically and histologically to be caused by Histoplasma capsulatum. The urine speciman was cultured by the same method as was used in the throat and at 37°C the yeast form appeared in 26 days.

SUMMARY

In summary, we present the first reported case of histoplasmosis in West Virginia. The diagnosis was made before autopsy. The suspected portal of entry is the mouth. Positive cultures were obtained of the feces, throat, and urine before death, and of a lymph node taken at autopsy. A histoplasmosis complement fixation test was positive in a titre of 32. A lowered total serum proteins was noted. Treatment, including aureomycin, was unsuccessful.

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THE MORTALITY PICTURE, GOOD AND BAD

The mortality experience of the Metropolitan Life Insurance Company for the first nine months of 1950 reveals a record low death rate of 6.4 per 1000 policyholders. Although the principal communicable diseases of childhood are being virtually eliminated as causes of death, the toll attributable to degenerative disease shows no such decline. Meanwhile, death rates from cancer, diabetes and motor vehicle and occupational accidents actually mount.

Vitamins, immunizations, antibiotics and skillful surgery help to make man live longer, but the environmental obstacles that plague the race have a way of posing as many new problems as were just solved. The biologic seesaw keeps coming down no matter how frantically man props and shores the end that is up.

When people do not die young, they live to die at older ages. A 20,000,000 rise in the population of the United States occurring in the past ten years means that the chronic problems of overcrowding, aging, unemployment and lack of housing or food are replacing the acute outbreaks of yesteryear—the great plagues of smallpox, yellow fever and cholera. When the international scene is considered, war is revealed as another great epidemic disease that takes its toll just as surely as accidents due to motor vehicles and occupational hazards.

The scientist and the physician have little cause for complacency despite their impressive charts, which show only one part of the broad picture.—New England Journal of Medicine.

NEEDED: MORE BLOOD

By KENNETH R. NELSON, M. D.,
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The impetus given to the use of human blood and blood derivatives in the practice of medicine during the past decade presents a major problem to the nation's physicians and hospitals. That problem is blood procurement.

For many years blood was obtained almost entirely from the relatives or friends of the patients who needed it. Deficits were made up by professional donors, often at a cost beyond the means of most patients. In emergencies, appeals frequently were made through the medium of radio and press. When several donors respond to such emergency calls, it might seem on the face of it that blood is always readily available. Few, if any, physicians will agree with this view. Even when donors present themselves in sufficient numbers, there still is the task of serologic tests, blood grouping and determination of RH factor—time-consuming procedures which may mean the difference between death and survival to the patient.

A stable, readily available supply of blood is one of the goals of the medical profession. The established hospital blood banks have, of course, proven of inestimable value. But the seriousness of the difficulty confronting many physicians is pointed up by some bald figures.

A recent preliminary survey by the American Medical Association discloses that of the 6,160 hospitals in the country, only 1,517 (or about one-fourth) have blood banks of their own. The ability of these blood banks to meet normal needs of day by day practice showed great variation. Those hospitals which do not have blood banks still must depend mainly upon the usual emergency recruitment methods.

No hospital blood bank is in a position to meet sudden mass emergencies such as might be presented by a major disaster, a catastrophic fire or hurricane, a train wreck or an airplane crash. And what of the hospitals which have no blood facilities of any sort? What about an unpredictable military emergency? These ever-present possibilities haunt not only physicians but are a matter of grave concern to all who are charged with responsibility for the nation's welfare and security.

On July 20, 1950, the Secretary of Defense designated the Red Cross as the official procurement agency for blood and blood derivatives for the armed forces and assigned it the responsibility of coordinating all private and institutional blood banks cooperating in the collection of blood for the military. The first call for blood for combat troops was made on August 21. Since that time more than 120,000 pints of blood have been turned over to the military establishment for use as whole blood in Korea, at military hospitals, and for processing into plasma for emergency military use.

In August, 1950, the National Security Resources Board requested the Red Cross to assume responsibility for planning, operating and coordinating a nationwide blood program to provide blood and blood derivatives to meet civil defense needs.

To meet expanding needs, the Red Cross will establish, in addition to its regional programs, more than a score of centers in metropolitan areas to collect blood exclusively for defense purposes.

The needs for whole blood are demanding enough. But, in addition, vast quantities of blood are used to provide special derivatives required in the treatment of kidney disorders, liver ailments, measles, scarlet fever, mumps and burns. The production of derivatives such as immune serum globulin and serum albumin is entirely dependent upon new supplies of whole blood.

Since the end of the war most of these derivatives have been processed from the wartime plasma declared surplus to military needs and returned to the American Red Cross. This supply of plasma is running low. It cannot be expected to last beyond this year. Hence more and more whole blood is urgently needed. Since 1944 the American Red Cross has distributed to physicians more than two and a half million vials of immune serum globulin, without charge, through state health departments. More than 25,000 units of this globulin, used to combat measles, have been distributed in West Virginia. Many physicians in this state are in a position to know what this has represented in the prevention of complications which may leave lifetime handicaps or even cause death.

At present, physicians procure blood in several ways: through private blood banks, from hospital blood banks, from local facilities provided by medical, public health and voluntary groups. In the latter category is the American Red Cross. The combined efforts of all these agencies still leave physicians in many communities dependent upon emergency appeals for blood.

The American Red Cross is now the largest single source of whole blood in the nation. Through the Red Cross National Blood Program

inaugurated in 1948, many hospitals receive their entire blood supplies. Many others receive supplementary help. This program now operates 40 regional centers through which blood from voluntary donors is collected, processed and distributed to hospitals, physicians and clinics on the basis of need. More than 25,000 hospitals in 39 states are its beneficiaries. More than 1,250,000 pints of whole blood, tested and ready for use after cross-matching, already have been supplied. Several more regional blood centers will be in operation before the end of the current year. These centers, added to hospital and other private blood banks, offer a network of blood facilities which can and must be expanded in the interest of good medical practice as well as that of national safety.

Deploying from each regional center in the Red Cross program, bloodmobiles go into surrounding suburban and rural areas, collect blood, return it to the regional centers for processing and then return needed blood to the hospitals in the communities served by the center.

Hospitals in West Virginia are now receiving blood collected and distributed through Red Cross blood centers at Washington, D. C., Roanoke, Va., and a new center recently opened at Huntington.

In addition to the National Blood Program, more than 200 Red Cross chapters participate in various ways in helping to provide blood supplies for their communities. Some chapters recruit donors for local hospitals, some recruit and type donors and some lend their efforts to community education so that donors will be willing to respond to calls when needed. Several West Virginia communities receive this service.

In 1950, basic changes have been made in the organization of the Red Cross National Blood Program, gearing it for closer cooperation with national medical and health groups and with government agencies. In recognition of the growing importance of blood both for civilian medical practice and national military emergencies, the program has been made a separate service of the Red Cross. Under the revised plan, the development of medical policies and procedures, as well as professional technics and practices, is the responsibility of a committee composed of six nationally known physicians. The chairman of this committee is Dr. Ross T. McIntire, former Surgeon General of the Navy and national director of the Red Cross Blood Program since its establishment. Other members of this medical committee are Dr. Charles A. Janeway, Harvard Medical School, Dr. I. S. Ravdin, University of Pennsylvania, Dr. Charles A. Doan, Ohio State University, Dr. Carl V. Moore, Washington University School of Medicine, St. Louis, and Dr. Russell L. Haden, medical director of the program.

At the request of the Red Cross, the Secretary of Defense, the chairman of the Atomic Energy Commission, the chairman of the National Security Resources Board, the administrator of Veterans Affairs of the Veterans Administration, the administrator of the Federal Security Agency and the director of the National Institute of Health have named their chief medical officers as advisers in the planning and operation of the program. Ahe American Medical Association, the American Hospital Association, the American Association of Blood Banks, and the College of of American Pathologists have designated liaison representatives to cooperate with the medical committee of the Red Cross. The National Research Council, which played an important part in blood procurement in World War II, continues its close collaboration with the Red Cross in its expanding blood program.

Special medical and scientific consultants who continue their services with the committee are: Dr. Elmer DeGowin, University Hospital, Iowa City, Dr. Everett I. Evans, Medical College of Virginia, Richmond, Dr. Frank Hartman, Henry Ford Hospital, Detroit, Dr. Joseph Stokes, University of Pennsylvania, Philadelphia, Dr. George Scatchard, Massachusetts Institute of Technology, and Dr. Britton Chance, University of Pennsylvania. In addition, other well known medical and scientific consultants assist the Red Cross in guiding the newly reorganized program.

The medical committee has stressed the importance of continuing the development and appraisal of new methods in the collection, processing and preservation of blood and all its component parts. These steps, the committee believes, should eventually make it possible to "stockpile" as well as distribute blood and its fractions for the nation's health in time of peace and for its protection in time of national disaster. The committee has pointed out that the Red Cross National Blood Program has been planned for rapid expansion in case enormous quantities of blood are needed in a short time. The Red Cross, in cooperation with community and hospital blood banks, is working to that end.

Some of the side effects of aureomycin are interesting: mucuous membrane changes have been reported in the form of perianal irritation, gross angular stomatitis, cheilosis, vesiculopapular eruptions on the buccal mucosa, glossitis (occasionally the black hairy tongue), vaginitis and vulvitis.—J. F. in Ohio State Medical Journal.

THE ACUTE ABDOMEN*

By PHILIP THOREK, M. D.,†
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The subject of the acute abdomen will always present an interesting challenge to the practitioner and surgeon alike. I have examined charts from the surgical services at the Cook County Hospital for a period of fourteen years, the purpose being to determine which diseases are most frequently mistaken in the acute abdomen. To my surprise I did not find fifty or seventy-five conditions which confuse us, but rather six outstanding ones that we mistake most frequently. These six conditions are:

1. Acute appendicitis
2. Acute cholecystitis
3. Perforated peptic ulcer
4. Acute hemorrhagic pancreatitis
5. Renal colic
6. Coronary disease

There is a seventh disease which deserves special consideration, namely, salpingitis. Acute or chronic salpingeal pathology is frequently associated with perihepatitis which produces pain in the right upper quadrant (pseudogallbladder pain). Because of this, gallbladder exploration and other surgical procedures have been done in cases of salpingitis, resulting in danger to the patient and embarrassment to the surgeon.

To make a diagnosis one must have a simple and workable plan in mind. Our plan consists of four headings, namely, history, present symptom complex, physical examination and laboratory data. This routine has served us well and we utilize it daily.

ACUTE APPENDICITIS

The more one sees of acute appendicitis, the more one respects the condition. The statement "only an appendix" is indeed a dangerous one. This condition is most frequently found in individuals under the age of forty and is somewhat more common in males. It will be recalled that gallbladder conditions appear most frequently after the age of forty. The story the patient relates is usually quite stereotyped. To put it in his language: "Something I ate gave me a bellyache." This is his way of describing acute epigastric distress. When he gets his "bellyache" he often attempts to obtain relief with either a cathartic or an enema. Within the first twenty-four hours his "bellyache" becomes a soreness low on the right side. His acute epigastric distress has become localized in the right lower quadrant. The "two-question test" is both useful and time saving. Question Number 1: "Where was your pain when it started?" To this interrogation the patient points to his entire abdomen. Question Number 2: "Where does it hurt you now?" He then points to the right lower quadrant, usually McBurney's point. This simple method of having the patient demonstrate diffuse pain which localizes in the right lower quadrant will diagnose the vast majority of cases of acute appendicitis.

Nausea and vomiting have been impressed upon us as being associated with appendicitis. This is the exception and not the rule. Anorexia is more constant and more important than either nausea or vomiting. Anorexia, nausea and vomiting are three degrees of one symptom; anorexia is the mildest form and is associated with mild distention of the appendix; nausea the middle degree, is due to moderate distention; vomiting, the maximum degree, is found in cases of greatly distended appendices. The most common symptom in acute appendicitis is anorexia, and if the patient states that his appetite is not altered we doubt the diagnosis of an acute appendix. Two complaints which are extremely rare in acute appendicitis are diarrhea and chills. These probably are present in less than 1 per cent of the cases. Constipation is the rule.

Fever is not an early finding in acute appendicitis; in fact, if present, it is suggestive of peritoneal soiling. It is true that cases of acute appendicitis may have a fever of 102 F., or 103 F., but these are no longer cases of appendicitis; they are cases of far advanced peritonitis. Children prove the exception to this rule. If patients with appendicitis could be operated upon when the temperature is below 99 F. the mortality would be very low.

Acute appendicitis does not give right rectus rigidity. Although the reverse is taught in many schools and textbooks, this point should be clarified. It is impossible for an individual to contract his right rectus muscle without contracting the left; therefore, when pressure is made upon an inflamed area, both rectus muscles contract. When only one rectus is rigid it suggests an underlying mass such as a tumor or abscess. When both recti contract to pressure it should be considered "muscular defense" rather than right or left rectus rigidity. The importance of this bears emphasis when we realize that diagnosis, treatment and prognosis may depend upon the presence of right rectus rigidity or simple muscular defense.

The iliopsoas and obturator signs are not signs which diagnose acute appendicitis; rather they

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are signs which locate an acute appendix. Probably a misconception has arisen because these signs usually are discussed under the heading of acute appendicitis; they may, however, be produced in other diseases. The right iliopsoas sign is elicited by placing the patient on his left side and hyperextending the right leg. If the sign is positive, pain is produced over the iliopsoas fascia which will be manifested in the region of the right lower quadrant. In the presence of a history of acute appendicitis this would signify that the inflamed appendix is overlying the iliopsoas fascia and is retrocecal. A positive obturator sign will locate an inflamed pelvic appendix. It is conducted in the following way: With the patient on his back the thigh is flexed upon the abdomen and the leg upon the thigh; the leg is then abducted. This causes internal rotation of the thigh and stretches the obturator internus muscle. If this produces pain it is diagnostic of a fasciitis involving the obturator fascia, which could be caused by an inflamed tube, appendix, ovarian cyst, et cetera. If a history of acute appendicitis is elicited and there is a positive obturator sign, we conclude that the appendix is low-lying and in the pelvis. Rovsing's sign is also helpful. It is elicited by pressing over the cecum; the colonic gas which has been pushed to the right will produce pain over the cecal region; this is quite diagnostic of acute appendicitis.

Routine bidigital examinations are done; at times an acute appendix or appendiceal mass may be felt. Late and neglected appendices may produce a pelvic abscess which points rectally or vaginally, and this examination reveals the proper site and time for incision and drainage.

The laboratory data usually consists of a white blood count and a urinalysis. More important than the white blood count or urinalysis is a differential blood count; this is easy to do and is more accurate. If the polymorphonuclear count is high, it is assumed that an acute infectious process is present; a high polymorphonuclear count in the presence of a low white count means a poor prognosis. The urinalysis is negative usually but may be misleading; a few red cells in the urine are not pathognomonic of renal pathology. Negative urines have been recorded where a renal stone completely blocks the ureter so that no blood or pus can pass into the bladder.

The reason for the high morality in acute appendicitis can be summarized in the alliteration utilizing the three "p's", namely, purgation, procrastination and poor surgical judgment.

ACUTE CHOLECYSTITIS

The dictum that certain types of people are predisposed to certain types of diseases seems to be correct. The gallbladder type is described as fair, fat and forty, usually being a female in the latter third or fourth decade and somewhat obese. There is always an exception to the rule; hence, the most fulminating hydrops of the gallbladder on our service was seen in a young, thin boy of sixteen. The age of forty is related to a previous history of pregnancy, and this is theoretically explained in the following way: the average female has her children in the third decade of life and, while pregnant, physiologic hypercholesterolemia develops. Some of the cholesterol is deposited on the mucous membrane of the gallbladder and forms polypi which break off and become the nuclei for stones. It may take from ten to twenty years for gallstones to attain any appreciable size, so that by the time she reaches her fourth decade the stone is large enough to obstruct or irritate. Nulliparous women can also have gallstones or gallbladder disease but this too, is the exception and not the rule.

The history of recurrent attacks of abdominal pain in a middle-aged female, so severe that the physician must administer a sedative, is an acute gallbladder until proved otherwise. Acute appendicitis does not require morphine; renal colic will be differentiated presently, and coronary occlusion is rare in the female. One of the most unusual lesions noted in the female is a perforated peptic ucler. The gallbladder patient also presents a previous history of "selective dyspepsia". By this we mean that there are certain specific foods that she cannot tolerate, of which there are four primary offenders: the fried and fatty foods, raw apples, cucumbers and cabbage. The patient does not use the term "dyspepsia", but describes this distress as the two "b's", namely, bloating and belching. To summarize and describe the gallbladder patient one may use an alliteration and state that she is the patient with the seven "f's": she is the fair, fat, fertile, flatulent, flabby, female of forty.

The complaint is one of pain, and it is important to determine the type of pain which is present. A constant pain is due to edema, but colicky pain is caused by obstruction. This is one of the factors which indicate whether the patient should be treated conservatively or surgically. It is unwise to treat an obstructed lesion conservatively since these are cases which result in early gangrene and perforation. Morphine should not be used in gallbladder disease because it is a smooth muscle contractor and since the gallbladder is a smooth muscle organ one should not administer

a medicament which would stimulate its activity. By increasing muscle tonus, morphine may actually aggravate or provoke gallbladder pain and colic. One should not state, however, that the drug must never be used in gallbladder disease since it still has its place, namely, to prevent shock. These patients are treated first with nitrite therapy. One breaks an amyl nitrite bead and lets the patient inhale the vapors; nitroglycerin 1/100th grain is placed under the tongue, and sodium amytal 3 grains, or any other barbiturate, is given by mouth. If this gives no relief we administer a hypodermic which consists of demerol 100 mg. and nitroglycerin 1/100th grain. Should these measures fail, antispasmodic therapy with such drugs as papaverine, aminophylline, et cetera, is tried. Morphine is used only after all other measures have failed.

Gallbladder pain usually is located under the right costal margin, but may be referred to the stomach since these two organs originate from the same embryologic segment. The stomach responds to this stimulus in one of three types of gastric spasm: (1) pylorospasm, (2) midgastric spasm and (3) cardiospasm. If pylorospasm is produced, the gallbladder condition might be confused with peptic ulcer; if midgastric spasm results, a stomach carcinoma may be erroneously diagnosed; if associated with cardiospasm, the pain appears on the left, producing pseudocoronary pain, and coronary disease may incorrectly project itself into the diagnostic picture.

Referred pain should not be confused with radiation of pain. By radiation we mean that gallbladder pain, located under the right costal margin, may radiate along the path of the seventh intercostal nerve to the inferior angle of the right scapula, or the interscapular region. Gallbladder pain, therefore, cannot radiate to the right shoulder. Shoulder pain is an entirely different mechanism which involves the phrenic nerve and which is indicative of peritonitis. When a gallbladder patient has true shoulder pain a diagnosis of gangrenous or ruptured gallbladder with biliary peritonitis should be made.

Temperature, pulse and respirations are included under the heading of physical examination. The patient with an acute gallbladder has an early high fever, hence, a temperature of 102 F. is not unusual within the first twelve to twenty-four hours of acute cholecystitis. The early fever is explained by the absence of submucosa. Since this tough resisting layer is lacking, there is greater chance for early contamination and absorption in the peritoneal cavity. The patient has a pulse which is increased according to his temperature; therefore, for every degree rise in fever there will be approximately a ten beat increase in pulse rate. Respirations are slightly increased because breathing is painful. This is due to the fact that the inflamed gallbladder rubs against the sensitive parietal peritoneum; because of this, acute gallbladder disease may be confused with pneumonia or pleurisy.

Although pain, a symptom, may be referred anywhere along its nervous path, tenderness, a physical finding, remains at the site of pathology. This is an excellent diagnostic rule having few if any exceptions. The tenderness associated with gallbladder disease will be located in the region of the right costal margin. If it is most marked on a level with the umbilicus, it may be difficult to determine whether the condition is an inflamed, low-lying gallbladder or an acute high-lying retrocecal appendix. Two methods aid in the differentiation of these two conditions. First, we recall that the normal abdomen reveals a tympanitic note to percussion in all four quadrants. If the tenderness opposite the umbilicus is due to an inflamed gallbladder, we assume that the organ is unusually large or that a ptotic liver with an inflamed gallbladder at its free border is present. This would cause an obliteration of the normal tympany in the right upper quadrant and in its place the percussion note would be one of dullness or flatness. If the patient presents tenderness on the level with the umbilicus and retains normal tympany in the right upper quadrant, this would point to a high-lying retrocecal appendix. Another method of differentiating the gallbladder and appendix is by means of Ligat's test. This test locates areas of hyperesthesia over an inflamed organ. If the tenderness is due to gallbladder disease, an area of hyperesthesia (elicited by picking up the skin and letting it drop) is present from the umbilicus upward to the right costal margin. If the tenderness is due to an acute appendix, the area of hyperesthesia will extend downward from the umbilicus to Poupart's ligament.

A rectal examination is done as a routine procedure in every physical examination. More important than the rectal or vaginal examination is a so-called bidigital examination which is conducted by placing the index finger in the vagina and the middle finger in the rectum with the perineum between. This will immediately orient the examiner and adnexal pathology will be revealed.

A flat x-ray film should be taken in every acute abdominal condition. One may determine whether a calcified gallbladder or visible stones are present. It also gives an indication as to whether

or not the liver is enlarged or ptotic. Routine laboratory tests are done.

PERFORATED PEPTIC ULCER

This condition is rare in females. Usually a previous history of peptic ulcer or hemorrhage can be obtained, but the onset may be with perforation.

The patient states that he was seized with a sudden pain, usually after eating; this was so severe that it doubled him up. The classical picture of perforated peptic ulcer with board-like rigidity and a shock-like syndrome is too well known to bear repetition. Two signs which should be sought for in every case, however, are: (1) the findings with auscultation and (2) the presence of a pneumoperitoneum. Auscultation reveals an absolutely silent abdomen when an ulcer perforates, leaks and soils the peritoneal cavity. Murphy stressed the importance of this finding many decades ago. When intestinal sounds are present, the probability of perforated peptic ulcer is remote. There are exceptions, and one of these will be discussed presently under the subject of forme fruste ulcer. The next sign which helps clinch the diagnosis is the demonstration of a spontaneous pneumoperitoneum. Normally a magenblase or stomach air bubble is present. When an ulcer perforates, this air bubble escapes into the general peritoneal cavity, and can be demonstrated either by percussion or with the fluoroscope; the latter method is by far the more accurate. The patient is placed on his left side so that the free air bubble may gravitate upward between the liver and the right hemidiaphragm. By so doing, the liver is displaced downward and is separated from the diaphragm. Normally, the liver hugs the diaphragm and no air space is visible between them. If this air is of an appreciable amount, normal liver dullness is obliterated and in its place a tympanitic note is produced by percussion. The sign is easy to demonstrate, quite pathognomonic of perforated peptic ulcer, and present in about 70 per cent of all cases.

The forme fruste ulcer deserves special mention. The term refers to a pinpoint perforation in the stomach or duodenum which is immediately sealed over by muscular contraction or by the overlying liver. Therefore, the spillage is minimal and the amount of peritoneal soiling is small. Such patients may experience a sudden sharp pain in the epigastrium, but the typical physical findings are lacking. These patients may be able to straighten up and walk about. Abdominal sounds usually are present and the air bubble may remain intragastric, having had no chance to leave the small perforation. These patients, therefore, present a misleading picture and the cases have been misdiagnosed. However, with the ingestion of their next meal they usually reperforate and then present the typical findings.

The temperature, pulse and respirations will depend upon whether or not shock is present. Most perforated peptic ulcers present a shock-like picture which varies in its intensity. The shock associated with perforated ulcer responds rapidly to therapy. Within a few hours, the classical picture of peritonitis develops with the associated increase in temperature, pulse and respiratory rate.

The contents from a perforated ulcer may pass downward along the so-called "paracolic gutter of Moynihan", pool around the appendix and produce exquisite tenderness at McBurney's point. The diagnostician must then be on his guard, since such a history would suggest epigastric distress with localization in the right lower quadrant which could be confused with an acute appendix. Upon exploratory operation, free fluid will be found in the peritoneal cavity with all signs of peritonitis, and a red appendix seen and removed. These patients usually die if the leaking ulcer is overlooked. This catastrophe can be avoided if, before closing the abdomen, the appendix is opened and the mucous membrane examined. Since acute appendicitis starts in the lumen of the appendix and travels outward, a normal appearing mucous membrane would suggest looking elsewhere for the cause of the peritonitis.

Laboratory data includes the flat x-ray film which has been discussed under the subject of spontaneous pneumoperitoneum. Routine blood count and urinalysis are done. Some of these patients might have bled and, although perforated ulcers rarely produce massive hemorrhage, signs of a secondary anemia may be present.

ACUTE HEMORRHAGIC PANCREATITIS

It is important to recall that this disease may appear in one of two forms: either acute edematous pancreatitis or hemorrhagic pancreatitis. The former presents a mild clinical picture, but the latter which is associated with fat necrosis and occasionally hemorrhagic peritonitis produces a fulminating one. The acute edematous form usually improves rapidly without therapy within forty-eight hours, but hemorrhagic pancreatitis gets progressively worse. It is the hemorrhagic type, therefore, which is important to identify and treat promptly.

Although the etiology of pancreatitis is unknown, there seems to be a mechanical factor which is associated with spasm, stones, swelling and stasis. Recent work seems to emphasize the relationship between acute pancreatitis and acute cholecystitis. This seems to be due to a common

factor which is an obstruction distal to the junction of the pancreatic and common bile ducts converting them into a "common channel". An actual reflux of pancreatic juice into the gallbladder during an attack of acute pancreatitis has been shown. The patient with acute pancreatitis usually is of the same type in which gallbladder disease develops, therefore, the condition is more common in females, rarely occurring before the age of forty, and is seen in stout persons. The ratio of colored to white is 1:50. The attack usually follows the ingestion of a heavy meal. The pain is dramatic, sudden and excruciating; it is felt in the epigastrium, and radiates into one or both loins. In this way pancreatic pain radiation resembles an inverted fan. When the patient sits up, or lies on his abdomen, the pain is relieved; it is aggravated when he is on his back. Hence, in most pancreatic conditions, be they tumors or inflammations, the patient usually is found lying on his abdomen or in a sitting position. Reflex vomiting or retching almost always occurs; emesis which is truly reflex in nature is never feculent.

Physical examination reveals a patient who usually is in shock with cold and clammy extremities, subnormal temperature and a rapid, thready pulse. Local epigastric tenderness is almost always present and is associated with a type of muscular defense which is localized in the same area. The rigidity is not truly board-like in nature, and the tenderness is most marked midway between the umbilicus and the xiphoid. An occasional finding is ecchymosis in one or both loins or, at times, around the umbilicus. This is due to extravasated blood which finds its way around the retroperitoneal space and presents itself as greenish yellow or purplish discolorations. This finding, however, takes two or three days to appear. Mild jaundice is present in about half of the cases; this is explained by the fact that the common duct is pressed upon by the swollen head of the pancreas. Abdominal auscultation usually reveals a quiet but not silent abdomen.

Laboratory findings may be helpful in the diagnosis. An increase of serum amylase is specific in the acute phase, although a normal reading does not rule out acute pancreatitis. Polowe has emphasized the importance of determining the blood amylase activity in terms of cuprous oxide precipitation. He has shown that moderate to marked blood amylase activity is almost always associated with disease of the pancreas, and that normal or decreased blood amylase almost always excludes pancreatitis. Hypocalcemia usually is present and the level found usually is below nine. A flat x-ray film of the abdomen may reveal separation of the upper and lower limbs of the duodenum brought about by edema of the head of the pancreas. This latter finding is unusual.

RENAL COLIC

Stones are not the only substance which produce renal colic, since the same syndrome may be produced by a small blood clot, inspissated pus, uratic debris, or a kinking of the ureteropelvic junction in a ptotic kidney.

The condition is more common in males, and the patient may reveal a history of previous attacks, a hereditary influence, a story of gout, or parathyroid pathology.

The patient complains of a sudden pain which starts in the lumbar region and radiates to the testicle, vulva or the inner aspect of the thigh. With this pain he becomes extremely restless and thrashes about. A patient who is experiencing colic is restless and moves about, but one who has peritonitis lies perfectly quiet and resents being moved. Vomiting is a common symptom, as is frequency of urination. During the act of micturition the pain may be altered.

Physical examination rarely reveals any elevation of temperature, but extremely characteristic of the condition is bradycardia. It has oftimes been stated that when a patient with an acute abdomen has "a clean tongue and a slow pulse" he has renal colic until proved otherwise. Tenderness is not marked in the region of the twelfth rib of the involved side, and to elicit this finding it is unnecessary and cruel to utilize any type of "punch" test. The tenderness is so exquisite that mild percussion will demonstrate it. We prefer to use the term "Murphy tap" to "Murphy punch". A zone of hyperesthesia usually is found posteriorly at the level of and slightly below the twelfth rib. If this area is anesthetized with novocaine, the hyperesthesia and pain disappear.

A flat x-ray film may reveal a stone if such is present, but this is not reliable since nonopaque substances also may produce kidney colic. An intravenous pyelogram can be made without disturbing the patient and, if necessary, the films can be taken at the bedside with the aid of a stationary grid. The significant finding for a diagnosis of a stone in the ureter is the anuria which may be present on the affected side; the opposite side shows normal excretion. The kidney on the affected side usually appears increased in density since the dye in these tubules is more concentrated. This finding is sufficient for a diagnosis of nonopaque stones in the ureter. A catheterized specimen of urine usually reveals pus, blood and albumin. The presence or absence of pus and blood in the urine is not pathognomonic since a stone may completely block the ureter and result in normal urine. On the other hand, an inflamed appendix may be attached to the ureter, kidney or bladder, resulting in secondary ureteritis, ne-

phritis or cystitis with associated hematuria. In such instances the laboratory report actually may be misleading.

CORONARY DISEASE

Although this belongs to the realm of the internist, the general practitioner as well as the surgeon must be on his guard to avoid the fatal error of confusing an acute coronary disease with an acute abdominal condition.

Men are most susceptible to coronary disease, and it is found usually in those past the age of forty. A previous history of dyspnea or pain in the chest during exertion or excitement may be elicited. The attack is sudden, with severe pain in the chest which radiates out the left arm, toward the abdomen, or to both shoulders. There is a sense of impending death with severe fright which usually supersedes the complaint of pain. The radiation also may be toward the epigastrium, so that the examiner's attention is directed to the abdomen rather than the chest. A usual complaint during such an attack is one of "indigestion". Although the pain of acute coronary disease may occur in the abdomen, it does not become localized, hence, no area of local abdominal tenderness is ever found. Marked abdominal distention may be present in coronary pathology, but muscle defense and rectus rigidity are lacking. In abdominal catastrophes the patient lies perfectly quiet, but the coronary patient resembles the colic in that he is restless and tosses about. The acute cardiac patient presents veins in the neck which are distended and full, in contrast to the patient with the surgical abdomen who may appear pale and bloodless. Signs of impaired circulation usually are present, such as dyspnea, orthopnea and cyanosis. Auscultation usually will reveal rales in both bases due to pulmonary congestion. Cardiac enlargement, feeble heart sounds and, occasionally, a pericardial friction rub may be noted. During auscultation of the abdomen, normal intestinal sounds will be heard which are absent or diminished in cases of spreading peritonitis.

It should be emphasized also that a distinction should be made between acute coronary occlusion and acute coronary insufficiency. Acute coronary insufficiency presents itself as an episode of angina pectoris varying from simple transitory chest pain or pressure to severe pain or collapse. It usually is relieved by glyceryl trinitrate. Coronary occlusion is the complete closure of an artery and is not influenced or precipitated by external environmental factors. It is not relieved by glyceryl trinitrate, which may even aggravate it.

Positive electrocardiographic findings are pathognomonic, but one is not always fortunate enough to have an electrocardiogram handy. Leukocytosis may be present some hours after the disease takes place, and the urine usually is negative unless there is associated renal pathology.

It is realized that many other conditions at times require differentiation in the acute abdomen, among them strangulated hernias, regional ileitis, mesenteric lymphadenitis, mesenteric thrombosis, ruptured ectopic pregnancy, ruptured graafian follicle, ileocecal tuberculosis, vasitis, torsion of the omentum, volvulus, intussusception, ad infinitum. However, when one misses one of the unusual conditions he does not feel quite as responsible or guilty as he would feel, having missed one of the aforementioned "big six".

NAILBITING

Studies indicate that most persons bite their nails during stress, the habit serving as a simple tension reducing mechanism. There is no evidence that simple, "mild" nailbiting is a "neuropathic" trait, nor can it be considered as indicative of a pathologic personality. It is unrelated to sex or level of intelligence. The habit must be evaluated in relation to other traits such as enuresis, or stuttering. With similar signs of tension it may be a significant behavior characteristic.

In cases of mild nailbiting no treatment is indicated. Overemphasis on the habit serves to fix it rather than dissipate it. In severe nailbiting, treatment should be directed toward seeking and removing the basic emotional facts causing the act. In most instances the only treatment needed is more affection, understanding, and sympathy, with fewer demands by the parents.

Muscular activities tend to release pent-up energy otherwise likely to be expressed as tension. All punitive measures are to be condemned. Measures to remind the nailbiter are often helpful, such as nail polish in the girl, and a bandage in the boy to cover the "wounded" finger.—Maury Massler, D.D.S., M.S., and Anthony J. Malone, D.D.S., in Journal of Pediatrics.

GROWING OLD

It is not sad to grow old. It is rather a difficult art, and one acquired by few. To grow old is sad indeed if one's great desire is to hold back the receding years . . . to keep one's hair from growing white, or one's eyes from becoming dim, or the wrinkles from chiseling their way across the brow. The most beautiful thing in life is an old soul made the better by experience, more indulgent, more charitable; loving mankind in spite of its wretchedness, and adoring youth without the slightest tendency to mimic it. Such a one is like an old Stradivarius whose tone has become so sweet that its value is increased a hundredfold, and seems almost to have a soul.—Charles Wagner in The Morton Messenger, as quoted in Industrial Med. and Surg., March, 1951.

The President's Page

A thirty-year dream of the West Virginia State Medical Association has become a reality with the establishment of a medical-dental-nursing school and medical center in this state.

Hundreds of doctors, members of other professional and lay groups, and individuals generally over the state have done a tremendous amount of work in bringing this campaign to a successful conclusion It would be impossible to list on one page the names of all who had a part in the enactment of this particular legislation. For the record, I do want to call attention to the fact that the work of the following professional and lay people has been outstanding:

Governor Okey L. Patteson, who placed this legislation at the top of his list and gave it everything he had, which was plenty; Senate President W. Broughton Johnston, who has been a guiding influence behind the movement for the past two years; House Speaker William E. Flannery, who successfully guided the bills through the House; the members of the Senate and the House who stood firmly behind the Governor, President Johnston, and Speaker Flannery in the long fight against the greatest odds that have confronted our legislators at any session in recent years;

The members of our steering committee, Drs. D. A. MacGregor, Tom Bess, Frank Langfitt, Tom Reed, Charlie Watkins, and Bob Wilkinson, whose active work and unfailing support have meant so much to this project during the past few years; Drs. A. J. Villani, H. C. Hays, J L. Patterson, Andy Amick, Guy Michael, Jake Huffman, Wade St. Clair, Max Barber, J. P. McMullen, The McCuskeys, Fred Richmond, Jim Klumpp, Doff Daniel, Betty McFetridge, Lyle Gage, Don Roberts, Hu Myers, George Evans, Terrell Coffield, and D. W. Ritter, who did such effective work at the local level;

Frank Knight, Harry Hoffman, and Charlie Armentrout, of the Charleston Gazette, Jack Maurice, of the Charleston Daily Mail, Sid Barksdale, of the Bluefield Sunset News, Tom Stafford, of the Raleigh Register, Eugene Scott, of the Beckley Post Herald, George Armstrong, of the Fayette Tribune, Earl Sampson, of the Williamson Daily News, Lewis Welch, of the Logan Banner, and William Keyser, of the Welch Daily News, for their persistent and most effective editorial and news support; Harry Brawley and Ross Edwards, of Radio Station WCHS (Charleston), for newscasting and spot announcements that were "tops" in their respective fields; the independent bottlers who courageously and unselfishly lent their support to the campaign to tax soft drinks as a method of financing the school; and Mrs. Ross P. Daniel and Mrs. Ben W. Bird, Jr., and all the members of the Auxiliary over the state for obtaining the names of thousands of citizens to petitions favoring the establishment of the school.

Behind the entire campaign has been the guiding genius of our own Charlie Lively, who never lost sight of the main objective—a four-year school.

There is another thing which we should always remember: The legislative representatives of the West Virginia State Education Association, while engaged in an individual campaign to increase teachers' salaries, gave loyal support to the establishment and financing of our project. To these good people we acknowledge a deep debt of gratitude.

Frank J. Solvay

President.

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AT LAST—A FOUR-YEAR SCHOOL

The four-year school of medicine, dentistry, and nursing, which has been the No. 1 project of the West Virginia State Medical Association for many, many years, has been established by the legislature and will be constructed in this state at a site to be selected by Governor Okey L. Patteson before July 1, 1951.

The people of West Virginia are the real beneficiaries of this new legislation, for we are confident that the operation of a four-year school within the borders of this state will eventually mean more doctors and dentists and nurses for West Virginia.

We congratulate Governor Patteson and the members of the legislature who courageously stood behind him in this fight for the establishment and maintenance of the school. The campaign reached its climax on March 9, when both branches of the legislature completed action on the two bills before the legislature, one creating the school, and the other providing for the method of financing its construction and maintenance.

We also congratulate all members of the medical, dental, and nursing professions and the wide-awake professional and lay groups throughout the state who unwaveringly continued the campaign for this new school until success was achieved.

The 50th Legislature may well "point with pride" throughout the years to come to the enactment of this major legislation which will forever remain as a monument to a Governor with courage to fight for the things which he believes necessary for the welfare of the people of this state.

We have no hesitancy in pledging to Governor Patteson the full cooperation of the West Virginia State Medical Association in the task that lies ahead, one that will require for its success the united support of all of our people.

STATE MEDICAL HALL OF FAME

The test of real leadership does not always lie in results attained, but when success follows a campaign under effective leadership, it is important that credit be given where credit is really due.

During the sixty-day session of the West Virginia legislature, Dr. Frank J. Holroyd, president of the West Virginia State Medical Association, was on the job 'round-the-clock during the campaign for a four-year school of medicine, dentistry and nursing. All this in addition to his many duties as a physician and hospital executive.

To our personal knowledge, there was one time early in March, when the fate of the school was hanging precariously in the balance, and when success or failure depended upon just a few votes in the legislature, when Doctor Holroyd maintained a twenty-four hour vigil, all the while contacting home folks by phone on a strictly "grass roots" level, pleading for the support needed for this particular legislation.

We don't suppose that there has ever been a similar situation during any legislative period in the history of the West Virginia State Medical Association. Never before to our knowledge has such an intensive campaign been waged by a leader of the medical profession for the passage of legislation, and never before has there been such united support accorded such a leader for any major project advocated by the medical profession.

No general ever went into battle with his forces united more strongly behind him. The members of the steering committee, the "Committee of 55," and officers and members of component societies and the auxiliary over the entire

state more than rallied to the cause and, with Doctor Holroyd, supported Governor Okey L. Patteson and leaders in the legislature to the fullest extent in their efforts to enact the necessary bills into law.

Besides being one of the outstanding physicians in West Virginia, Doctor Holroyd has proved that he is a born leader, one who inspires confidence, one whom all members of the State Medical Association are proud to acclaim as a great president of a great organization.

The passage of this legislation is a monument to Governor Patteson and the crowning event of Frank Holroyd's term as president of the West Virginia State Medical Association. If for no other reason than his night-and-day, month-in and month-out fight for a four-year school, Frank Holroyd certainly deserves a place in West Virginia's Medical Hall of Fame.

THE JEWEL OF FORBEARANCE

There are times when we recall a story we heard years ago which impressed us very much. In antebellum days, a slaveholder of the Old South had been urging upon a slave the virtue of thinking three times before he spoke. One day, while burning brushheaps with the slave, the old gentleman's coattail caught fire without attracting his attention. The slave, however, noticed it, and remembering the recent indoctrination, said to his master, "Master, I think; Master, I think; Master, I think your coat's caught afire."

The old slave's reasoning might well be applied to the current ruckus being raised about the United Mine Workers Welfare Fund. Elsewhere in this issue we are, at the request of Dr. Ray M. Bobbitt, carrying a letter from Dr. Warren F. Draper, and one from the UMW Advisory Committee to the Fayette County Medical Society. These are published, following the publication of the resolution of the Fayette County Society, in order that the profession of the state may understand all sides of the controversy.

Some phases of the overall picture may well be stressed a little more. First, the administrators of the Welfare Fund are trying, with the help of organized medicine, to develop a mechanism whereby group medical service may be furnished large numbers of people within the scope of free enterprise and private practice rather than under the blighting hand of a governmental bureaucracy. Such an ideal coming from organized labor should in itself inspire toleration on the part of the individual doctor of medicine, and make him "stop, look and listen."

While our star is at the moment in the ascendency, the battle to prevent the socialization of medicine is only undergoing a lull and is by no means won. Hard fighting and further sacrifice are still ahead.

This is clearly shown by the recent attempt on the part of the Washington "do-gooders" to write socialized medicine into the new draft bill by the incorporation of a section which would authorize the President to set up a federally financed medical program to "rehabilitate" draft registrants who failed to meet physical or mental requirements, a scheme which Dr. George F. Lull, testifying before a Senate armed services subcommittee, properly denounced as an effort to provide a wide expansion of government medicine under the guise of national defense.

All human progress has been made by the trial and error method, and pioneering must, of necessity, be a matter of experimentation. The Welfare Fund, when first tried out, was, in our judgment, extended too rapidly, and, as a result, had to be re-evaluated and a new start made. Accordingly, it behooves the administrator of the Fund to ponder well the old Latin proverb, *festina lente,* and actually hasten slowly.

Rome was not built in a day and economic progress actually to progress must be evolutionary rather than revolutionary. If we bear and forbear we probably will get further in the long run than will be the case if we call each other names.

THE NATIONAL BLOOD BANK PROGRAM

The American Red Cross is rapidly developing its blood bank program which probably means more for the welfare of the American people than any other project which has ever been undertaken by that organization, and all of its efforts, as far as our knowledge goes, have been sound, well considered and constructive.

The blood program, in our judgment, possesses enormous potentialities and possibilities, especially so when we consider the war clouds lowering on the world horizon.

Admiral McIntyre and his co-workers have done a wonderful job in the development of the program, not the least of which is the demonstration of what a voluntary organization can accomplish on a national scale without governmental interference. The people of America, and especially the medical profession, owe him a debt

of gratitude for showing what can be accomplished by a voluntary organization without a taint of governmental socialism.

Every doctor owes it to himself, his profession and his country to lend all aid he can to the furtherance of the blood bank program.

ABLE PUBLIC SERVANTS

Never during our experience with legislative committees have there been two more sincere chairmen of committees handling health legislation that Mrs. Nell W. Walker, of Winona, Fayette County, who heads the House of Delegates' Committee on Health, and Dr. Ward Wylie, of Mullens, chairman of the Senate Committee on Medicine and Sanitation.

For several years, Mrs. Walker and Doctor Wylie have held these posts in the legislature. It has been necessary for them, together with the members of their respective committees, to screen practically all bills introduced that in any way concern the health of our people. This is no small job at any session of the legislature, and the people of our state, all of whom are more or less interested in matters affecting health, owe a vote of thanks to these two valuable public servants who have so ably discharged the duties of the offices to which they have been appointed.

Mrs. Walker and Doctor Wylie both have personal interest in health legislation. Mrs. Walker is a daughter of the late Dr. John W. Walker, and she has a son who is a doctor. Doctor Wylie for many years has practiced his specialty of surgery at Mullens.

Mrs. Walker has served continuously since 1936 as a member of the House of Delegates from Fayette County. Senator Wylie was a member of the House from Wyoming County, 1935-36. He served as a member of the Senate, 1939-42, resigning to enter the military service during World War II. He was elected again in 1944, and re-elected for a four-year term in 1948.

We commend Mrs. Walker and Doctor Wylie for conscientious, faithful, and efficient service as heads of the two more important standing committees in the House of Delegates and the West Virginia Senate.

HAPPINESS

Happiness, you know, is not found in Florida, or on the cool Minnesota lake in the summer or on the lovely cruise around the world—real happiness is found inside ourselves.—Alfred Ellison, M.D., in J. Ind. St. Med. Assn.

GENERAL NEWS

FIGHT FOR FOUR-YEAR SCHOOL WON AT CLOSE OF LEGISLATIVE SESSION

Governor Okey L. Patteson will in April begin the study of the matter of location for the new four-year school of medicine, dentistry and nursing. The selection of the site for the school was left to the governor under the provisions of House bill 477, passed by the legislature March 9.

The bill was passed by the Senate unanimously. According to press reports, Senator Don Eddy (D), of Morgantown, and Senator Andy Swearingen (R), of Walker, voted "no" on the roll call, but afterwards changed their vote to "aye" so as to make it unanimous.

The House bill was adopted with but one amendment, proposed by Senator Harry E. Moats (R), of Harrisville, deleting the provision authorizing the Governor to appoint an advisory committee to assist him in reaching a decision concerning the site for the school. Senator Moats had previously in the session introduced a bill authorizing the Governor alone to make the decision.

Moats Amendment Adopted

The Moats amendment was adopted by a vote of 18 to 14. Senator Eddy, who led the fight in the Senate to designate Morgantown as the site for the school, offered an amendment to authorize the Governor to appoint a twelve-member committee to advise with him concerning the site. The amendment specified that the nine members of the Board of Governors of West Virginia University should be included as members of the committee. This amendment was defeated by a vote of 19 to 13.

Prompt Action in House

The bill was reported in the House shortly after its passage in the Senate and, on motion of the majority leader, J. Hornor Davis (D-Kanawha), was taken up for immediate consideration. On his motion, the House concurred in the Senate amendment to give the Governor sole responsibility for the selection of the site for the school. The vote was 53 to 39, with two members not voting.

On the passage of the bill, the vote was yeas 58, nays 32, with 4 absent and not voting

Delegate Harry R. Pauley, (D-McDowell), then moved to take from the table House Bill 268, providing a tax on soft drinks to finance the construction and maintenance of the four-year school. The bill had previously been passed by the Senate.

On the passage of the tax bill, the vote in the House was 76 to 14, with 4 absent and not voting.

"Pop" Tax Effective July 1

The bill creating the four-year school and authorizing the Governor to select the site is effective from

passage (March 9, 1951). The "pop" tax bill is effective July 1, 1951, when the state will begin the collection of one cent a bottle on soft drinks and a comparable amount on syrups used at fountains.

It is estimated that the special tax on soft drinks will produce between three and four million dollars per annum, which is earmarked for the construction and maintenance of a four-year school. It is believed that the amount collected will produce sufficient funds to complete the school within the very near future, and the tax is sufficient to provide adequate funds for maintenance.

Long Fight Successful

Agitation for a four-year school was started by the West Virginia State Medical Association several years ago. Early during World War II, the idea had to be shelved due to the scarcity of building materials. It was then that the arrangement was made with the Medical College of Virginia to accept annually twenty of the thirty graduates of the two-year school at Morgantown. For this service, the state of West Virginia pays the Virginia school a subsidy of one thousand dollars per student per annum. In addition, the students themselves pay tuition.

When it became increasingly difficult to have West Virginia students completing their pre-medical education accepted in medical schools over the country, the State Medical Association then laid plans to wage an intensive campaign for the construction of a four-year school in this state.

"Grass Roots" Compoign

The board of public works earmarked over $6,000,000 for this purpose in the budget bill presented to the legislature in January, 1949. Due to various causes, the measure was not passed at that session. Shortly thereafter the State Medical Association began a "grass roots" campaign for the establishment of the school. A steering committee was set up composed of Dr. Charles E. Watkins, of Oak Hill, Chairman, and Drs. D. A. MacGregor, of Wheeling, Frank V. Langfitt, of Clarksburg, Thomas Bess, of Keyser, R. J Wilkinson, of Huntington, Thomas G. Reed, of Charleston, and Frank J. Holroyd, of Princeton, for the purpose of waging a campaign for the enactment of the necessary legislation at the 1951 session of the legislature. In addition, a "Committee of 55" was named to assist the steering committee, there being one member from each county in West Virginia. All were members of the West Virginia State Medical Association.

PR Leods Statewide Compoign

The public relations committee then began a statewide education campaign and the result was that more than fifty members of the legislature had pledged support for the school before the 50th session was convened last January. The campaign was under the personal supervision of Dr. Frank J. Holroyd, of Princeton, then state public relations chairman, who assumed the office of presidency of the Association on January 1.

Governor Strong Advocote of School

Governor Okey L. Patteson made a strong plea for the four-year school in his message to the Legislature early in January The two bills (HB 477 and HB 268) were supported by the administration, and the Governor repeatedly stated that legislation for the creation, construction and maintenance of the school stood at the top of the list of measures he desired the legislature to enact into law.

At one time during the consideration of the "pop" tax bill, the Governor personally appeared before the Senate finance committee and pleaded for over a half-hour for the bill to be reported out favorably. Both Senate President W. Broughton Johnston and House Speaker William E. Flannery joined with the Governor in advocating the passage of the bill. For a while, there was doubt that the bills could be favorably acted upon due to the bitter controversy over the question of site. However, when the West Virginia State Medical Association through the president, Dr. Frank J. Holroyd, and the Board of Governors, with William G. Thompson, of Montgomery, as the spokesman, announced that they were in full accord with the provisions of the bill authorizing the governor to select the site, the opposing forces in the Legislature gradually accepted the idea, with the result that there was a substantial majority for both bills on passage in the Senate and House of Delegates.

TRANSFERS IN MEMBERSHIP

The following transfers in membership have recently been reported to the West Virginia State Medical Association:

Dr. Melvin E Lea, formerly of Philippi, from Barbour-Randolph-Tucker Medical Society to Canal Zone Medical Association. He is on the surgical staff at the Colon Hospital in Cristobal;

Dr. Frank S. Harkleroad, formerly of Beckley, from the Raleigh County Medical Society to the State Medical Association of Texas. Doctor Harkleroad is practicing his specialty of urology at Amarillo, Texas, where he has offices at 1218 West Eleventh Street; and

Dr. George H. Brown, formerly of Wheeling, from Ohio County Medical Society to New York State Medical Association. Doctor Brown is engaged in the practice of his specialty of Radiology at Clifton Springs, New York.

HUNTINGTON DOCTORS RELEASED BY NAVY

Two Huntington doctors who have seen active service in the Navy for several months have been released to inactive duty and have returned to practice in that city.

Commander James R. Brown (MC), USNR, who was called to active service September 1, 1950, was released to inactive duty January 29, 1951. He had been stationed at the U. S. Naval Hospital at Pensacola, Florida.

Commander Bruce H. Pollock (MC), USNR, who has been serving in the U. S. Naval Air Service since the fall of 1950, was released to inactive duty March 26, 1951.

1951 CHILDREN'S DIABETIC CAMP

A meeting of the West Virginia State Diabetes Association was held recently in Parkersburg and plans discussed for next summer's session of the Children's Diabetic Camp at "Camp Kno Koma" ("Indian" for No Coma). Since the camp was so successful last year, with 34 children attending from all over the state, a great deal of interest was shown in planning for another season.

It was decided to accept again the generous offer of the Carbide and Carbon Chemicals Corporation to use its "Camp Cliffside" (near Charleston) for another season. The camp will be held from August 26 through September 3, and the age limit will be from 8 to 15, inclusive (male and female).

According to Dr. John H. Gile, of Parkersburg, the staff will be composed entirely of volunteers. There will be three physicians at the camp at all times to keep the children in balance. Last year it was found that the children had to be put on an entirely different diet and insulin regime than they were on at home because of different living conditions and exercise. All children are sent back home on the same regime they were on before coming to camp.

Laboratory technicians, dieticians, nurses and camp counselors have also volunteered their services for the camp. So the camp should be very successful again and it is hoped that there will be an even larger enrollment of children than last year. To avoid any stigmata of poverty, there will be no charge. The funds necessary to run the camp are to be obtained by soliciting donations from interested individuals and groups.

Physicians knowing of any eligible diabetic children who desire to go to camp are requested to send their names to Camp Kno Koma, 1115 Quarrier Street, Charleston, West Virginia. Donations will be appreciated. With the increase in attendance that is expected this year, more funds will be needed than were obtained last year.

RELOCATIONS

Dr. Samuel I. Adelman, formerly of Elkins, is now located in Upper Darby, Pennsylvania, where he is engaged in the practice of his specialty of radiology. His address there is 5519 Windsor Avenue, Philadelphia 43, Pennsylvania.

* * * *

Dr. E. E. Vermillion, of Welch, has moved to Athens where he will continue the practice of his specialty of EENT.

* * * *

Dr. R. R. Brown, of Romney, has moved to Fort Ashby, West Virginia, where he will continue in general practice.

* * * *

Dr. E. O. Gates, who has been engaged in the practice of his specialty of EENT at St. Joseph, Michigan, has returned to Welch, and resumed practice in that city, where he is a member of the staff of Grace Hospital.

SECOND OF GP ACADEMY MEETINGS TO BE HELD AT BUCKHANNON, APR. 1

The second of a series of meetings being sponsored by the West Virginia Academy of General Practice will be held at the Buckhannon Country Club, near Buckhannon, Sunday, April 1, beginning at two o'clock. The following program will be presented:

"Family Counseling"—Walter R. Stokes, M D., Washington, D. C.

"Newer Advances In Plastic Surgery"—Gordon Letterman, M. D., Washington, D. C.

Doctor Stokes is a member of the American Planned Parenthood Association, and the American Psychiatric Association. He is the author of "Modern Pattern for Marriage."

Doctor Letterman is professor of plastic surgery at George Washington University and chief of plastic surgery at Walter Reed Hospital, Washington

All interested physicians are invited to attend this meeting, which will be in keeping with the educational policy of the Academy in bringing postgraduate medical education to physicians in all parts of the state.

Meetings will be held later in the year at Fairmont, Martinsburg, Logan, Beckley, Huntington, and Parkersburg.

Dr. Donald R. Roberts, of Elkins, is president of the Academy, and Dr. Carl B. Hall, of Charleston, secretary-treasurer.

GREENBRIER VALLEY AIDS AMA FOUNDATION

The Greenbrier Valley Medical Society has appropriated the sum of $200.00 as a contribution to the American Medical Association's Education Foundation. The contribution was authorized at the regular monthly meeting held in February.

In the letter of transmittal the secretary, Dr. H. Charles Ballou, of White Sulphur Springs, had this to say concerning the action of his Society:

"It was the consensus of the members present that by this move a donation could be given which would be representative of the membership as a whole, rather than from a few individual members. The members present presented an unanimity of opinion that this Foundation represents a truly forward step and one in which we as a group are particularly pleased in supporting.

"I am also pleased to write you at this time that it is our Society's intention to send on further donations at a six-months' interval to this Foundation. We are a small group and are not able to give large amounts, but we feel that we are fairly typical of large numbers of component societies and hope that this will perhaps stimulate other groups to do likewise."

NEW SUPERINTENDENT AT DENMAR

Dr. R. G Warren, of Williamson, assistant Mingo County health officer, has been named by Governor Okey L. Patteson as superintendent of Denmar Sanitarium to succeed Dr. J. H. Nelson, Jr., who has held the post for the past ten years. Doctor Nelson resigned to engage in general practice in Charleston.

27TH ANNUAL STATE HEALTH CONFERENCE

The 27th annual State Health Conference will be held May 10-21, 1951, at the Prichard Hotel, in Huntington.

The following program has been arranged for the three-day meeting:

Thursday Morning, May 10

Presiding—A. R. Collett, Assistant Dean, College of Arts and Sciences, West Virginia University.

Invocation—The Rev. Maurice Trimmer, Fifth Avenue Baptist Church, Huntington.

Address of Welcome—Hon. W. W. Payne, Mayor of Huntington.

"Introduction to an Understanding of Atomic Energy"—Dr. C. D. Thomas, Professor, Department of Physics, West Virginia University, Morgantown.

"Medical Aspects of Atomic Warfare"—(To be assigned.)

"Public Health Aspects of Atomic Warfare"—Dr. A. L. Chapman, Medical Director, Region 3, USPHS, Washington.

Thursday Afternoon

Presiding—Frank J. Holroyd, M. D., President, West Virginia State Medical Association, Princeton.

PANEL: Leader, J. J. Lawless, M. D., Director, West Virginia University Health Services, Morgantown; participants, Dr. C. D. Thomas, Dr. A. L. Chapman, and Miss Cecelia Robrecht, West Virginia State Department of Health, Charleston.

DEMONSTRATION—Radiological Monitoring—Dr. C. D. Thomas and Mr. Paul D. Halley, Bureau of Industrial Hygiene, State Department of Health, Charleston.

Thursday Evening

7:00—Banquet.

Friday Morning, May 11

Presiding—Mr. Lawrence M. Fisher, Engineering Field Associate, American Public Health Association, New York City.

"The Non-Medical Health Administration in Local Units"—Henry F. Vaughn. University of Michigan School of Medicine, Ann Arbor.

"The Indigent Medical Service Program in a County Health Unit"—Dr. Mark V. Ziegler, Chief, Bureau of Medical Services, Maryland State Department of Health, Baltimore.

PANEL — "MEDICAL AND PUBLIC HEALTH SERVICES IN THE WEST VIRGINIA CIVIL DEFENSE PROGRAM"

Leader—Dr. N. H. Dyer, State Director of Health, Charleston.

"West Virginia Civil Defense Plan"—Adjutant General Charles R. Fox.

"Local Health Service Director"—Dr. L. A. Dickerson.

"American Red Cross Program"—Mrs. Frances Altizer.

"Medical Services"—Dr. H. C. Huntley.

"Sanitation Problems"—Mr. H. K. Gidley.

"Laboratory Problems"—Miss K. E. Cox.

"Nursing Problems"—Mrs. Laurene C. Fisher.

"Health Information"—Mr. W. H. Rost.

The scientific program on Friday will be followed by a business session at which the report of the nominating committee will be received. At this same session, Dr. Guy R. Post, of Parkersburg, will submit a report concerning the recent American Public Health Association meeting.

The following section meetings will be held Friday afternoon, May 11:

Clerical and Vital Statistics
Health Administration
Human Relations
Industrial Hygiene
Public Health Nursing
Sanitation

Final section meetings will be held Saturday morning.

NEW OB. & GYN. SOCIETY

Obstetricians and gynecologists located in the Charleston area have organized under the name of "The Obstetrical and Gynecological Society of Charleston, West Virginia." Dr. Leo P. Seltzer is president of the new organization, Dr. George L. Grubb, vice president, and Dr. F. H. Dobbs, secretary.

Meetings will be held in the library of the West Virginia State Medical Association the second Thursday in each month from October through May.

The announced objects of the new society are (a) to create better understanding between doctors practicing obstetrics and gynecology; (b) disseminate information concerning new and modern concepts relative to this particular field; and (c) enable members to write and discuss papers of interest to the society.

Annual dues will be one dollar which will provide revenue sufficient to cover postage for notices of future meetings.

One paper on obstetrics and one on gynecology will be presented at each meeting. Each speaker will be allotted 20 minutes, and discussion will be limited to ten minutes. Speakers will be selected from an alphabetical list of the members.

Dr. H. M. Beddow and Dr. F. A. Clark, both of Charleston, were speakers at the meeting which was held in March.

MEDICAL TECHNOLOGISTS MEET APR. 21-22

The annual meeting of the West Virginia State Society of Medical Technologists will be held April 21-22, at West Virginia University, in Morgantown.

The following scientific program will be presented Saturday afternoon, April 21:

Address of Welcome—E. J. Van Liere, M. D., Dean of West Virginia University School of Medicine.

"Enteric Bacteriology"—Betty Love, M. T., State Hygienic Laboratory, Charleston.

"The Anemias"—A sound picture in technicolor, compliments of the American Cyanamid Company.

Discussion of the film—M. L. Hobbs, M. D., Professor of Pathology, West Virginia University.

The annual business meeting of the Society will be held April 22, and officers will be named at that time.

WEST VIRGINIA STATE MEDICAL ASSOCIATION

302 Atlas Bldg., Charleston, W. Va.

OFFICERS

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Second Vice President: J. C. HUFFMAN, Buckhannon
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WALTER E. VEST (1952), Huntington

A. M. A. Alternates:
JAMES L. WADE (1951), Parkersburg
PAT A. TUCKWILLER (1952), Charleston

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HU C. MYERS (1952), Philippi

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GEORGE F. EVANS (1952), Clarksburg

Fourth District:
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ATHEY R. LUTZ (1952), Parkersburg

Fifth District:
J. C. LAWSON (1951), Williamson
E. L. GAGE (1952), Bluefield

Sixth District:
D. C. ASHTON (1951), Beckley
RUSSEL KESSEL (1952), Charleston

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Child Welfare

Theresa O. Snaith, Weston, Chairman; Russell C. Bond, Wheeling; Henrietta L. Marquis, Charleston; Raymond M. Sloan, Huntington; Carl E. Johnson, Morgantown; Harlow R. Connell, Bluefield; A. A. Shawkey, Charleston; and Marcus E. Forrell, Clarksburg.

Revision of Constitution and By-Laws

Sobisca S. Hall, Clarksburg, Chairman; Walter E. Vest, Huntington; J. N. Jarrett, Oak Hill; Harry Coffman, Keyser; and R. A. Fawcett, Wheeling.

DPA Advisory

Hugh A. Bailey, Charleston, Chairman; H. M. Beddow, Charleston; and Marion L. White, Huntington.

Fact Finding and Legislative

Thomas G. Reed, Charleston, Chairman; D. A. MacGregor, Wheeling; Frank V. Langfitt, Clarksburg; Ward Wylie, Mullens; Guy H. Michael, Parsons; and W. Fred Richmond, Beckley.

Industrial Health

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Maternal Welfare

Charles L. Goodhand, Parkersburg, Chairman; M. B. Williams, Wheeling; Charles S. Mahan, Morgantown; J. E. Page, Clarksburg; E. J. Humphrey, Huntington; E. W. McCauley, Bluefield; and W. E. Hoffman, Charleston.

Medical Education

M. L. Hobbs, Morgantown, Chairman; Otis G. King, Bluefield, I. E. Buff, Charleston; Hu C. Myers, Philippi; and J. P. Baker, White Sulphur Springs.

Necrology

Don S. Benson, Moundsville, Chairman; George T. Evans, Fairmont; W. M. Warman, Morgantown; Logan W. Hovis, Parkersburg; and J. H. Wolverton, Jr., Piedmont.

Public Relations

John F. McCuskey, Clarksburg, and Paul L. McCuskey, Parkersburg, Co-Chairmen; E. Lyle Gage, Bluefield; William B. Rossman, Charleston; Clark K. Sleeth, Morgantown; Guy H. Michael, Parsons; L. Rush Lambert, Fairmont; James S. Klumpp, Huntington; and Edward S. Phillips, Wheeling.

Scientific Work

L. J. Pace, Princeton, Chairman; Cecil O. Post, Clarksburg; and James L. Wade, Parkersburg.

Syphilis

N. H. Dyer, Charleston, Chairman; Thomas B. Baer, Huntington; R. O. Halloran, Charleston; W. Carroll Boggs, Wheeling; and Frank S. Harkleroad, Beckley.

Tuberculosis

W. P. Bittinger, Summerlee, Chairman; V. L. Kelly, Jr., Bluefield; Wm. L. Cooke, Charleston; J. N. Reeves, Charleston; George F. Evans, Clarksburg; and Hugh S. Edwards, Beckley.

Conservation of Vision and Hearing

Ben W. Bird, Jr., Princeton, Chairman; A. C. Chandler, Charleston; Charles M. Polan, Huntington; Harry V. Thomas, Clarksburg; and John H. Trotter, Morgantown.

SPECIAL COMMITTEES

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SECTIONS

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Industrial Health

V. L. Chambers, Huntington, President (Deceased); and H. M. Brown, Belle, Secretary.

Internal Medicine

William A. Thornhill, Jr., Charleston, President; and A. B. Curry Ellison, Charleston, Secretary.

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Howard A. Swort, Charleston, Chairman; Robert T. Humphries, Clarksburg, Vice Chairman; and Dean L. Hosmer, Bluefield, Secretary.

Pediatrics

Archbold M. Jones, Parkersburg, Chairman; and William W. Davis, Parkersburg, Secretary.

Surgery

T. Kerr Loird, Montgomery, Chairman; and Robert C. Bock, Charleston, Secretary.

Urology

Clifton J. Reynolds, Bluefield, President, (Deceased); Thomas G. Reed, Charleston, Vice President; and John F. McCuskey, Clarksburg, Secretary-Treasurer.

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W. Va. Society of Anesthesiologists

Newman H. Newhouse, Charleston, President; Eldon B. Tucker, Morgantown, Vice President; and S. Elizabeth McFetridge, Shepherdstown, Secretary.

Scientific Assembly, W. Va. Heart Association

R. J. Condry, Elkins, President; James L. Wade, Parkersburg, Vice President; John S. Pearson, Huntington, Secretary; and Mr. R. E. Plott, Charleston, Treasurer.

West Virginia Ob. and Gyn. Society

Charles L. Goodhand, Parkersburg, President; Alfred M. Dearman, Parkersburg, Vice President; and Clarence H. Boso, Huntington, Secretary.

Association of Pathologists of W. Va.

Siegfried Werthammer, Huntington, President; and Melvin L. Hobbs, Morgantown, Secretary

MEDICAL PRACTICE ACT AMENDED

The bill (HB 248) amending the medical practice act to include a new class of candidates entitled to take the examination for license to practice medicine in West Virginia will become effective June 9, 1951. The bill was passed by the legislature March 9.

The bill includes among those authorized to practice medicine and surgery in West Virginia graduates of foreign medical schools whose diplomas have been authenticated by the medical licensing board, and whose premedical education meets the requirements of the act now in effect.

The bill provides that candidates for licensure must be citizens of the United States and must have resided in West Virginia for at least three years immediately preceding application for license. The applicant must be recommended by the medical society of the county in West Virginia in which he resides as possessing "the learning and experience requisite to the practice of medicine and surgery." If the applicant successfully passes an examination before the medical licensing board he is to receive a certificate entitling him to practice in this state.

The bill also provides that graduates of a medical school which was not at the time of graduation a class "A" school as defined by statute may take the examination, and upon passing, be issued a license to practice medicine in West Virginia provided the medical school from which he graduated has, prior to December 31, 1948, been classified as a class "A" medical school.

ACCP TO MEET IN ATLANTIC CITY

The 17th annual meeting of the American College of Chest Physicians will be held at the Ambassador Hotel, in Atlantic City, June 7-10, 1951.

Dr. George R. Maxwell, of Morgantown, is Governor of the College for West Virginia, and Dr. Walter E. Vest, of Huntington, a member of the committee on College by-laws.

Convocation ceremonies will be held on June 9, at which time certificates will be awarded the new Fellows.

Candidates desiring to take the examination for Fellowship are requested to contact the Executive Secretary, ACCP, 500 North Dearborn Street, Chicago 10, Illinois.

DR. C. A. ZELLER WITH VA AT CLARKSBURG

Dr. Charles A. Zeller has resigned as superintendent of Weston State Hospital to accept appointment as head of the psychiatric department of the new veterans hospital at Clarksburg. The resignation is effective March 31.

Doctor Zeller has been superintendent of the Weston institution since May, 1949, having been appointed by Governor Okey L. Patteson to succeed Dr. Joseph L. Knapp, now of Dallas, Texas. He is a former medical director of the Governor Bacon Health Center at Delaware City, Delaware. For many years prior to his acceptance of the post at Weston, he had been active in the mental health field in Pennsylvania, Michigan, and Indiana.

BIENNIAL REGISTRATION OF DOCTORS

All doctors practicing in West Virginia will be required to reregister with the state department of health prior to July 1, 1951, the end of the present biennium. The registration fee is $2.00, and application forms will be mailed in April to the last known address of every doctor in this state. The registration is for the new biennium ending July 30, 1953. The mailing of application blanks will be completed before May 1.

According to Dr. N. H. Dyer, state health commissioner, who directs the registration every two years, it is the policy of the medical licensing board to waive the payment of the registration fee by doctors who have retired from active practice. Such doctors should return the application form marked to show retirement from practice.

Doctors residing outside of West Virginia, who desire to keep alive their license to practice in this state, are required to pay the registration fee.

This registration is the second under the provisions of the reregistration law passed by the legislature at the regular session in 1949. The bill was sponsored in that session by the West Virginia State Medical Association and was passed without opposition in the legislature.

HIGH BLOOD PRESSURE RESEARCH CONFERENCE

The annual conference of the Council for High Blood Pressure Research of the American Heart Association will be held in Cleveland, April 6-7, at the Hotel Cleveland. An invitation has been extended to prominent business and industrial leaders of the country to attend the conference. Speakers will include Drs. Irvine H. Page, Louis N. Katz, and Henry A. Schroeder.

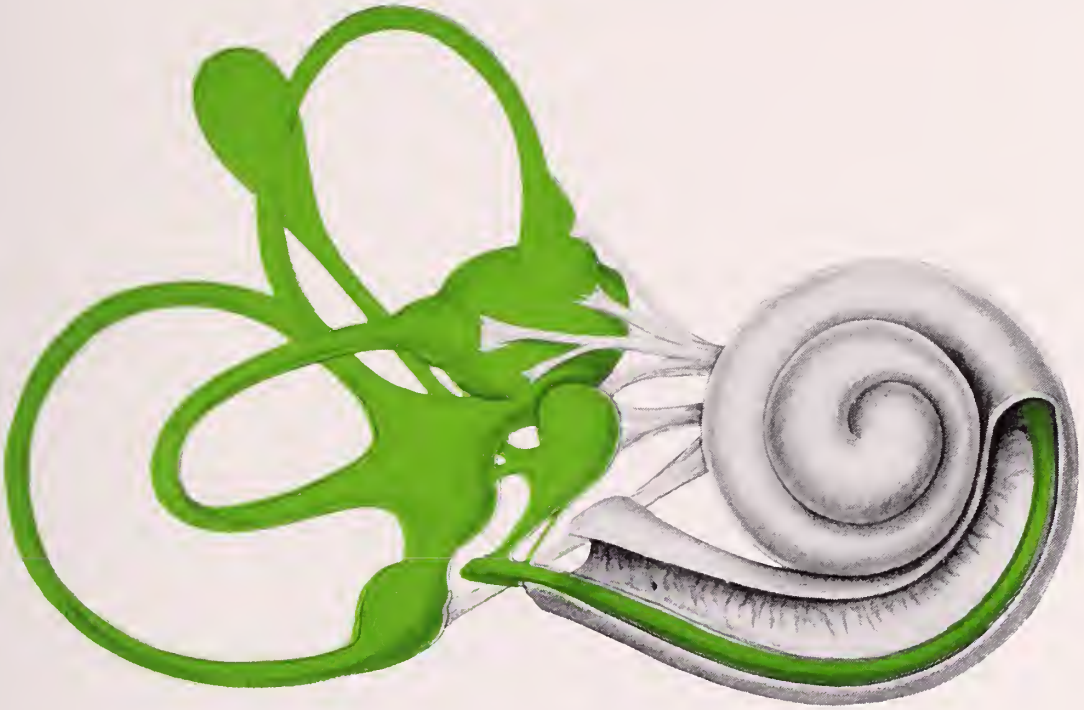
The Council for High Blood Pressure Research was formerly the American Foundation for High Blood Pressure. It was merged with the American Heart Association in January, 1950, becoming one of the component Councils of the Association's Scientific Council. Membership includes both laymen and physicians, and Alva Bradley, of Cleveland, is chairman.

AMERICAN CONGRESS OF PHYSICAL MEDICINE

The 29th annual scientific and clinical session of the American Congress of Physical Medicine will be held at the Shirley-Savoy Hotel in Denver, Colorado, September 4-8, 1951. All sessions will be open to physicians and other professional personnel. Full information concerning the meeting may be obtained by writing the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

CANCER CLINIC AT MARTINSBURG

The West Virginia Cancer Society and the Division of Cancer Control of the State Health Department are sponsoring a cancer clinic which will be held in Martinsburg, April 18, 1951, with members of the West Virginia State Medical Association serving as examiners. The necessary expenses incident to the clinic are being borne by the West Virginia Cancer Society.



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—Tuttle, A. D.: Special Breakdown of Case Histories, presented at the Airlines Medical Directors Association Meeting, New York, N. Y., Aug. 28, 1949.

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RESEARCH IN THE SERVICE OF MEDICINE SEARLE

OBITUARIES

ALBERT LESTER AMICK, M. D.

Dr. Albert Lester Amick, 71, of Charleston, died at his home in that city, March 8, following a long illness.

Doctor Amick was a son of the late James Anderson and Betty (Masters) Amick. He received his M. D. degree in 1907 from the College of Physicians and Surgeons, Baltimore. He had practiced in Charleston for over thirty years when he was compelled to retire about ten years ago because of illness.

During World War I, he served as first lieutenant in the Medical Corps of the Army.

He had been a member of Kanawha Medical Society, the West Virginia State Medical Association, and the American Medical Association since 1912, and had been an honorary member of those organizations since 1943.

Besides his widow, Thelma (Dickerson) Amick, he is survived by a son, John Anderson Amick, a student at West Virginia University, and a sister, Mrs. P. H. Kelly, of Montgomery.

BENJAMIN FRANKLIN BRUGH, M. D.

Dr. Benjamin Franklin Brugh, 66, formerly of Montgomery, died in a hospital in Clearwater, Florida, March 1, 1951. He had been in ill health for several years.

Doctor Brugh was born at Troutville, Virginia, son of Ollin U. and Maria Anne Brugh. He graduated from Roanoke College with the degree of A. B. in 1911. He received his M. D. degree from the Medical College of Virginia in 1915, and was licensed to practice in West Virginia the following year. Doctor Brugh joined Dr. William R. Laird in founding the Coal Valley Hospital (now Laird Memorial Hospital) in Montgomery, March 1, 1920. Previously, he had been located at Hansford, where he was a member of the staff of Sheltering Arms Hospital. His specialty was surgery. He had retired in 1938 from actice practice.

He was an honorary member of the Fayette County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. L. C. Morris, of Charleston; five sisters, Mrs. L. K. Davis and Mrs. E. W. Burrus, of Roanoke, Virginia, Miss Mary Brugh, Miss Blanche Brugh and Mrs. Lee Oberchain, of Troutville, Virginia; and four brothers, James, of Montvale, Virginia, Kenneth, of Pulaski, Virginia, Arthur, of Troutville, Virginia, and Robert, of Walton, Kentucky.

LEONIDAS R. HARLESS, M. D.

Dr. Leonidas R. Harless, 73, of Gauley Bridge, died February 27, 1951, at his home in that city. Death followed a heart attack.

Doctor Harless was born at Linden, Roane County, May 24, 1877. He received his M. D. degree in 1905 from Kentucky Medical Department, Louisville. After practicing for a short time at Spencer and Aronldsburg, he located in Fayette county where he continued in practice until his death.

He was a member of the Fayette County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by a daughter, Mrs. Helen Miller, of Gauley Bridge; two sons, James Harless, Portage, Pa., and Walter Harless, of Gauley Bridge; a sister, Mrs. Ola Lowery, Columbus, Ohio; and four brothers, Dr. W. F. Harless, of Madison, Okey and D. H. Harless, Parkersburg, and Cecil Harless, of Clearwater, Florida.

CLAUDE SIMUEL LAWSON, M. D.

Dr. Claude Simuel Lawson, 72, of Fairmont, died in a hospital in that city March 22 as the result of injuries sustained in an automobile accident on March 14.

Doctor Lawson received his academic education at West Virginia Conference Seminary (now West Virginia Wesleyan) Buckhannon, and graduated from Richmond Medical College (Medical College of Virginia) in 1910. He located at Boothsville, Marion County, where he remained in practice until 1926, when he moved to Fairmont. He remained in actice practice there until he was injured in the automobile accident. His specialty was obstetrics and gynecology.

Doctor Lawson was an honorary member of the Marion County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

Besides his widow, he is survived by two sons and three daughters.

CLIFTON JOHNSON REYNOLDS, M. D.

Dr. Clifton Johnson Reynolds, 54, of Bluefield, died suddenly of a heart attack while in his office at the Bluefield Sanitarium, March 24, 1951. While he had suffered a mild heart condition for a few years, he was apparently otherwise in good health at the time of his death.

Doctor Reynolds was born at Renon, Virginia, and received his academic education at Fork Union Military Academy. He received his M. D. degree from the University of Virginia School of Medicine in 1920, and taught pathology in that institution for a year after his graduation. He moved to Bluefield in 1921 where he established a department of urology at the Bluefield Sanitarium. He served continuously as head of the department until his death.

Doctor Reynolds was a member of the Mercer County Medical Society, the West Virginia State Medical Association, the American Medical Association, and the American College of Surgeons. At the time of his death, he was serving as president of the section on Urology of the West Virginia State Medical Association.

He is survived by his widow, the former Jane Via, of Charlottesville; three sons, Clifton J., Jr., of Matawan, New Jersey; Thurman, of Fort Lauderdale, Florida; and Pvt. Donald R., of the United States Army Air Force, Scott Field, St. Louis, Missouri; and one daughter, Mrs. William Ward, of Charlottesville.

He is also survived by his mother, Mrs. Mary Susan Reynolds, of Gretna, Virginia; four brothers, Dr. B. D. Reynolds, of Charlottesville, who heads a department of the University of Virginia School of Medicine; Reuben R., of Martinsville, Virginia; Robert H., of Gretna; and Floyd F., of Front Royal. Two sisters also survive, Mrs. Christine Stone, of Jordan Mines, Virginia, and Mrs. Julia East, of Charlottesville.

ELBERT LOGAN WRIGHT, M. D.

Dr. Elbert Logan Wright, 85, of Parkersburg, died suddenly at his residence in that city, February 10, 1951, following a heart attack.

Doctor Wright was born in Wilson county, Tennessee, son of the late James S. and Mary (Dodd) Wilson. He received his M. D. degree in 1897 from Vanderbilt University School of Medicine, Nashville, Tennessee, and had postgraduate work at Jefferson Medical College in Philadelphia.

He first located for practice in Texas and then moved to Calhoun County, West Virginia, where he engaged in practice for a short time, moving to Parkersburg at the turn of the century. He occupied the same offices on Market Street in that city from the time he moved there until his retirement in 1946.

He was an honorary member of the Academy of Medicine of Parkersburg, the West Virginia State Medical Association, and the American Medical Association.

He is survived by three daughters, Mrs. Joseph Joyce, Mrs. G. O. Hipps, and Miss Marguerite Wright, all of Parkersburg; a sister, Mrs. Meck Wills, and a brother, Willie Wright, both of Nashville.

MINORITY RULE

Let us look at the last presidential election, if you will, for just one moment. I believe that there are approximatey ninety million people in this country who are eligible to vote. Think of that! I believe that approximately fifty-two million of them are registered. Half of the registered number of voters voted, and that means the ruling party which got the slim majority of votes—51 or 52 per cent—constituted less than 15 per cent of the potential voters of this country.

If the country wants to go socialistic, I am for it as long as the majority of people vote it, but I will be darned if I want to be ruled in a socialistic, totalitarian country with 15 per cent of the people calling the terms.—Elmer Hess, M. D., in Rhode Island Medical Journal.

DON'T STAND STILL

During the past year we have by necessity and not by choice been fighting a defensive action. Now we have every reason to believe the enemy has been stopped but not put out of action. We must start our own offensive at once and choose our own terrain. We must show the people that we can provide a solution to their medical problems according to the American way of doing things. To stand still will be to invite another head-on attack.—Fred Sternagel, M. D., in Bulletin, Polk Co. (Iowa) Med. Soc.

COUNTY SOCIETIES

BARBOUR-RANDOLPH-TUCKER

Dr. H. C. Huntley, of Charleston, director of communicable disease control of the state health department, was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society, held February 15, at the Coach N' Four, near Elkins. He presented an interesting and timely review of the more or less common communicable diseases. His address was illustrated with slides.

At a short business meeting held preceding the scientific program, Dr. Harold Jellinek was elected to membership in the Society.

Dr. Guy H. Michael submitted a report on the status of medical school legislation, after which, the Society voted unanimously to wire Governor Patteson and the senators and delegates representing the counties embraced within the Society its approval of the bill to finance the school by means of a tax on soft drinks.

Dr. Hu C. Myers discussed the recent meeting of the West Virginia Cancer Society. He reported that this organization might possibly supply a part- or full-time worker in the tri-county area. The matter was referred to the local cancer society for study and recommendation.

Dr. Semon Lilienfeld, the president, presided at the meeting, which was attended by thirty members and guests.—Donald R. Roberts, M. D., Secretary.

* * * *

CABELL

A joint dinner meeting celebrating "Doctor's Day" was held by the Cabell County Medical Society and the Woman's Auxiliary, March 8, 1951, at the Hotel Frederick, in Huntington.

Dr. John P. Greene and Dr. Robert C. Wufman, of Huntington, were elected to membership in the Society, and Dr. Harry A. Smith was accepted as a member by transfer from the Boone County Medical Society.—James A. Heckman, M. D., Secretary.

* * * *

FAYETTE

Dr. Hugh S. Edwards, of Beckley, was the guest speaker at the regular monthly meeting of the Fayette County Medical Society, held March 11, at the Hotel Hill, in Oak Hill. He discussed recent methods of treatment of tuberculosis.

At the business meeting following the scientific program, Dr. H. F. Troutman, of Logan, a member of the Fayette Society, was elected to honorary membership.—Thomas C. Sims, M. D., Secretary.

* * * *

FORT HENRY ACADEMY

Dr. A. C. Ivy, professor of physiology at the University of Illinois College of Medicine, was the guest speaker at a dinner meeting of the Fort Henry Academy of Medicine, held February 27, at the Wheeling Hospital School of Nursing, in Wheeling. His

subject was, "Pancreatitis." Discussion was opened by Dr. W. P. Sammons, of Wheeling, and Dr. Robert Lewis, of St. Clairsville, Ohio.

The meeting was attended by over eighty members and guests and followed a dinner at the Fort Henry Club.—Robert U. Drinkard, M. D., Secretary.

* * * *

KANAWHA

Dr. G. Slaughter Fitz-Hugh, assistant professor of Otolaryngology, University of Virginia, was the guest speaker at the regular monthly meeting of Kanawha Medical Society, held February 13, at the Daniel Boone Hotel, in Charleston. His subject was "Maxillofacial Injuries."—Robert C. Bock, M. D. Secretary.

* * * *

McDOWELL

Two films, "Kidney Function in Health" and "Kidney Function in Disease," were shown through the courtesy of Eli Lilly and Company before the monthly meeting of the McDowell County Medical Society, held March 14, at the Appalachian Community Room, in Welch.

The films showed in condensed form the present day concepts of the kidney in health and disease.

Dr. R. O. Gale, the president, outlined briefly the program being placed in effect April 1 by the UMW Welfare and Retirement Fund concerning the hospitalization of mine workers and members of their families.

Following the reading of a resolution adopted by the McDowell Woman's Club with reference to facilities at the McDowell county jail for the care of juvenile delinquents, it was pointed out by Doctor Gale that the problem of juvenile delinquency is only a small part of the new program needed at the court house, jail, detention home and offices for various agencies in the county. The following committee was appointed by the president to confer with committees from civic clubs and other organizations interested in this subject: Drs. J. H. Anderson, Otis E. Linkous, Jr., and R. O. Gale.—Ray E. Burger, M. D., Secretary.

* * * *

MERCER

Dr. D. V. Kechele, of Bluefield, was the guest speaker at the regular monthly meeting of the Mercer Country Medical Society, held March 19, at Pete's Grill, in that city. His subject was "Atelectasis and Pneumothorax in the Newborn." The speaker pointed out the possible etiology, diagnosis and treatment of the condition described.

The paper was discussed by Drs. William M. Bruch, H. R. Connell, Ben W. Bird, Jr., E. Lyle Gage and V. L. Kelly.

Dr. Frank J. Holroyd, of Princeton, president of the West Virginia State Medical Association, submitted a detailed report concerning the enactment of legislation assuring the construction and maintenance in this state of a four-year school of medicine, dentistry and nursing, and he and Dr. R. H. Fowlkes discussed the provisions of a bill passed permitting certain graduates of foreign schools to take the examination for licensure to practice in West Virginia.—R. S. Gatherum, Jr., Secretary.

* * * *

MINGO

Mr. Stephen B. Preston, of Logan, senior counselor of the Division of Vocational Rehabilitation, was one of the guest speakers at the regular monthly dinner meeting of the Mingo County Medical Society, held February 14, at the Mountaineer Hotel, in Williamson. The other speaker was Dr. Edwin Riley, of Charleston, UMW area medical administrator.

Mr. Preston stated that the vocational rehabilitation program is specifically designed to help the person who is fully able to work except for a physical handicap. "The purpose of the program," he said, "is to relieve the handicap so that a man may pursue gainful employment."

Doctor Riley expressed his willingness to cooperate with the Mingo County Medical Society in handling many of the health and welfare cases of this area. At the close of his address, an invitation was extended him to attend regular Society meetings held monthly.

The day following the meeting, Mr. Preston's address on rehabilitation was broadcast by transcription over Radio Station WBTH, Williamson.—E. T. Drake, M. D., Secretary.

At a dinner meeting of the Mingo County Medical Society, held March 14, at the Mountaineer Hotel, in Williamson, the doctor-press-radio code of ethics, recently adopted at the annual doctor-press-radio meeting held at Charleston, was discussed by members of the profession and representatives of the press and radio who attended the dinner as guests.

It was the general consensus of all groups present that members of the medical profession should at all times realize the necessity of supplying the news services with information concerning the nature of the illness or injury, no matter how serious it may be, and the current condition of the patient in cases where the public has a "rightful interest to become acquainted with the facts."

Miss Alice Shein and Robert Bullio were present representing Radio Station WBTH, Williamson, and Earl L. Sampson and Charles C. Morfitt, Jr., represented the Williamson Daily News.

It was brought out at the meeting that, in a sparsely settled area, it would be decidedly impractical to have any one doctor designated as a spokesman for the component society, for in many instances the news would be "cold" before the spokesman could be reached for a statement. It was decided that each member of the society should handle these matters "on his own."

At a short business session following the meeting, Dr. William Henry Guthrie, of Red Jacket, was elected to membership in the Society.—E. T. Drake, M. D., Secretary.

WOMAN'S AUXILIARY

HARRISON

Nearly a hundred members and guests attended the annual Doctors' Day dinner sponsored by the Woman's Auxiliary to the Harrison County Medical Society and held March 3 at the Clarksburg Country Club.

After the invocation by Dr. O. W. Ladwig, Mrs. Richard K. Hanifan president of the Auxiliary, welcomed the members and guests, and the response was made by Dr. Robert T. Humphries, president of the Harrison County Medical Society.

Guests of honor included Dr. and Mrs. Bernard Allen, Dr. and Mrs. Paul Kassander, and Dr. and Mrs. Raymond Lipin. These doctors are members of the staff of the new veterans hospital in Clarksburg.

Candid moving pictures were taken at the dinner by Dr. L. Esker Neal, and pictures taken at the 1950 dinner were shown together with the motion picture, "A Date with West Virginia."

The social committee in charge of the dinner was composed of Mrs. Lynwood D. Zinn, chairman, and Mesdames W. W. Spelsberg, R. T. Humphries, J. E. Wilson, Frank V. Langfitt, and William H. Allman.—Mrs. E. Burl Randolph, Secretary.

* * * *

KANAWHA

Mr. Harry M. Brawley, of Charleston, public relations director of radio station WCHS, and assistant professor of political science at Morris Harvey College, and Mr. Charles Lively, executive secretary of the West Virginia State Medical Association, were the guest speakers at the annual public relations luncheon of the Woman's Auxiliary to Kanawha Medical Society, held March 13 at the Daniel Boone Hotel in Charleston.

Mr. Brawley urged the group to let the people know that the doctor feels that his knowledge is held in trust for the benefit of all humanity. Doctors, he said, "should admit the evils that exist within their own group but should stress that the profession stands squarely opposed to them. People should hear about the grievance committee and the night call program. The vicious propaganda that doctors have a tight little monopoly should be stopped by pointing to the successful efforts of the profession in obtaining the establishment of a four-year medical school in West Virginia."

Mr. Lively reviewed the entire legislative program enacted into law during the recent session of the legislature, speaking particularly with reference to the new four-year school of medicine, dentistry and nursing.

Mrs. P. A. Tuckwiller, president of the Auxiliary, presided at the luncheon, and Mrs. Joel Allen, public relations chairman, introduced the speakers.

Mrs. T. F. Mantz was the hostess and she was assisted by Mesdames Ralph McLaughlin, Owen McMillan, F. C. Reel, Earl Peck, J. Bankhead Banks, Ralph J. Jones, E. V. Jordan and R. H. Walker.—Mrs. John C. Condry, Secretary.

MARION

Dr. John M. Whitney, medical director and assistant manager of the eastern area of the American Red Cross, was the guest speaker at the regular monthly dinner meeting of the Woman's Auxiliary to the Marion County Medical Society, held February 27, at the Hotel Fairmont, in Fairmont. The Marion Society, meeting the same evening, adjourned after a short business session so that the members could attend the Auxiliary meeting.

Doctor Whitney's topic was "Civil Defense." He discussed certain pertinent aspects of civil defense at federal, state, and local levels, stating that it is the responsibility of local communities to protect and aid themselves as well as neighboring areas. He emphasized the importance of each individual volunteering for some particular job in the defense organization.

The speaker discussed generally the defense program and the part the American Red Cross must play in the project, particularly the blood donor program as it applies to the local community, the regional area center, and the national level overall administration.

Mrs. George T. Evans, the president, presided at the meeting, and the speaker was introduced by Mrs. S. W. Parks, chairman of public relations. Dinner arrangements were in charge of Mrs. John P. Trach.—Mrs. Rupert W. Powell, Recording Secretary.

* * * *

PARKERSBURG ACADEMY

Mrs. John Speed Harvey, of Huntington, executive director of the West Virginia Cancer Society, was the guest speaker at the March meeting of the Woman's Auxiliary to the Parkersburg Academy of Medicine, held at the Chancellor Hotel, in Parkersburg. Mrs. Harvey spoke most interestingly and informatively on the subject of cancer control in West Virginia. She stated that arangements had been made for the showing before the May 8 meeting of the Auxiliary of the sound film, "Breast Self Examination."

Mrs. Charles L. Goodhand presented a report on the Cancer Supply Closet and also on Nurse Recruitment.

The following nominating committee was announced by Mrs. W. W. Davis, the president: Mesdames F. L. Blair, Richard Sheridan, Harold Ulch, and T. L. Harris.

Hostesses for the meeting were Mesdames R. D. Lattimer, Julius Bell, John Gile ,and A. M. Dearman.

Mrs. A. M. Jones announced that the annual "Doctor's Day" dinner would be held at the Parkersburg Country club.—Mrs. S. William Goff, Secretary.

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RALEIGH

The Woman's Auxiliary to the Raleigh County Medical Society was sponsor at a delightful tea at the Woman's Club in Beckley March 19, arranged for the purpose of stimulating and promoting its nurse recruitment program.

Senior girls of the Woodrow Wilson High School were honor guests, and the affair was also attended by registered and student nurses in the Beckley area. The guest speaker was Miss Louise Acker, superintendent of nurses at Beckley Hospital. She urged all girls who

The

MYERS CLINIC HOSPITAL

PHILIPPI, WEST VIRGINIA

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Clinical Pathology:
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are preparing to enter training to choose their schools wisely.

Miss Acker explained briefly the five-year program leading to the degree of B. S. in nursing, and the three-year course providing a diploma in nursing. The speaker stated that, following a recent survey of schools of nursing in West Virginia, standards are being raised and many improvements made. Mrs. W. C. Covey was general chairman of the meeting.

At a short business meeting preceding the tea, the president, Mrs. R. G. Broaddus, appointed the following nominating committee to present nominations for officers for the coming year: Mesdames B. K. Peters, W. C. Covey and W. C. Hays.—Mrs. G. F. Fordham, Secretary.

MEDICAL EDUCATION 1933 AND 1947

To those not familiar with the problems inherent in medical education, it may seem like a comparatively simple matter to increase the number of medical students. Many factors play a part in medical education, however, and the expansion of a medical school is a costly process.

Here in Iowa, two years ago the Fifty-third General Assembly considered withholding appropriations from the University until the admission of medical students was raised from 90 to 120 a year. The fact that such action was even considered shows a lack of knowledge of the problems involved.

Comparison was made of the enrollment in the thirties as opposed today. Only 47.8 per cent, or 68 of 142 students, of the 1933 class were graduated. This means that more than half of those entering were educated for varying periods of time but failed to complete the course, thus wasting the time and money spent on them. Today greatly improved standards of selection have lowered the number of failures or withdrawals. Of 87 admissions to the class of 1947, 73 or 84 per cent were graduated.

The character of teaching, too, has altered greatly since 1933. At that time the emphasis was on lectures. The number attending made little difference and relatively few teachers were required. Today the emphasis is on the individual student. The most important teaching is done in the laboratory, at the beside, in conferences and seminars. This is the highest type of educational procedure but also the most expensive.—J. Iowa St. Med. Soc.

SEROFLOCCULATION TEST FOR CANCER

One of the most dramatic reports made in the field of cancer during recent years is that of Penn and associates at the University of California, Los Angeles, in which they report a seroflocculation test for cancer. The patient's plasma is mixed with a lipoid fraction of a portion of the liver of a patient who has died from cancer. If the plasma becomes clear, the test is positive. If it becomes turbid, it is negative.

This test has been tried on 1000 normal individuals with 99.5 per cent negative reactions, and in 830 patients with known cancer with 98.6 per cent positive reactions. —Warren H. Cole, M. D., in Northwest Medicine.

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Vol. VLVII MAY, 1951 No. 5

CLINICO-PATHOLOGIC CONFERENCE*

Presentation of Case by Charles M. Caravati, M. D., Assistant Professor of Clinical Medicine, Medical College of Virginia, Richmond,

Presentation of Pathalagy by F. L. Apperly, M. D., Professor of Pathalogy.

Case Presentation

First Admission:

A 68 year old married, American, Baptist, farmer's wife entered the hospital at 2:20 p. m. complaining of epigastric pain and the vomiting of blood.

About 10:00 a. m. the day of admission she suddenly became very nauseated, this being followed by epigastric fullness and pain. Shortly she became weak and dizzy. In a few minutes she vomited considerable quantities of coffee-ground material and large clots of blood. She was promptly brought in by ambulance, a distance of seventy miles.

For about one year she had noted occasional epigastric fullness and at times would be nauseated and would vomit. She felt that such attacks were prone to follow eating large quantities of vegetables. She had not noted her stools. Occasionally she had epigastric burning but these digestive disturbances had followed no pattern, nor had there been any particular epigastric pain day or night. Weight status unknown.

In the past there were no particular illnesses nor operations. She was said to have had malaria as a child; she was subject to rather frequent attacks of "bronchitis", and had been found to have an elevated blood pressure on several occasions in recent years. There were no peculiar food habits nor any history of consumption of alcohol.

Examination showed a very stout middle-aged woman in no distress. Temperature 99 F. Pulse 100. Respiration 24. Blood pressure 120/60. The skin was dry and the conjunctive and mucous membranes pale. The head and neck were normal. The chest was emphysematous with a few coarse rales on the right. The heart was thought to be slightly enlarged to the left. There were occasional extrasystoles and a soft systolic murmur all over the precordium, loudest at the apex. The abdomen was very obese. The liver edge could be felt four fingers below the costal margin in the right mid-clavicular line, and three fingers in the midline. One observer recorded a sense of fullness in the region of the spleen but could not feel this organ. Another recorded the spleen as palpable. The attending physician recorded "spleen questionable" on one occasion and "palpable" on another. The abdomen was otherwise negative. Pelvic examination was not made. The extremities were normal except for noticeable hypertrophic changes in all finger joints.

In the laboratory a voided urine specimen showed 1+ albumin, 3+ sugar, 80-100 WBC and a few hyaline casts per high power field. The hemoglobin was 6.6 grams, RBC 2,710,000 and WBC 11,900 with polys. 78, eos. 1, lymphs. 20, and monos. 1. An STS was not recorded.

Course in Hospital: During the first few hours she felt better and the blood pressure rose to 165-170/70-80. She then vomited about 100 cc. of bright blood with some clots and her pressure declined to 135/60, pulse 120.

*Presented before the 83rd annual meeting of the West Virginia State Medical Association at White Sulphur Springs, July 27, 1950

She then began to feel better, but complained of epigastric pain and "sour stomach". She was given 500 cc. of whole blood and placed on milk and cream 45 cc. each every two hours by mouth. During the next few days she felt much better except for nocturnal restlessness and epigastric discomfort. She was given an occasional dose of sodium luminal, and on one occasion morphine sulphate grains 1/6. On the third hospital day a fecal impaction developed which was manually removed without difficulty. Chemical test on this was postive for blood. She complained of aching in her fingers but her digestion was quiet.

On the fifth hospital day she was feeling quite well although weak. A voided urine specimen was normal. The fasting blood sugar was 122. The hemoglobin was 8.8 grams, the RBC 3,340,000 and the WBC 5,300, with 54 polys., 1 eos., 1 bas., 41 lymphs, and 3 monos. The prothrombin time was 21 seconds, control 15 seconds, concentration 34%. The serum proteins were 7.6 with albumin 2.9 and globulin 4.1. The serum bilirubin was .2 direct and .4 total. The BSP showed 14.5%. Repetition of these tests showed total protein 6.5, with albumin 2.6 and globulin 3.9. The serum bilirubin was .2 direct and .6 total. The BSP was 22.9%. The cephalin cholesterol flocculation was 3+. Upper G-I x-ray showed a normal stomach and duodenum except for prominent gastric rugae.

During the next ten days she improved. She occasionally complained of epigastric distress, relieved by soda mints or milk and cream Her blood pressure stabilized at 150-140/90-80. Her temperature was never normal throughout any twenty-four hours, but never exceeded 100 F. She was receiving iron. Her hemoglobin gradually rose. Her WBC varied from 3,100 to 3,700 with polys. 66 to 58, eos. 6-3, bas. 1-0, lymphs. 20-30, and monos. 3-5. The peripheral blood was normocytic and slightly hypochromic. There was little or no polychromasia. There was marked anisocytosis. The platelets appeared normal. The sternal marrow showed hyperplasia of the erythroid series with normal megakaryocytes. The bleeding time was 1.5 minutes and clotting time 2 minutes.

On the seventeenth hospital day she seemed entirely well except slightly anemic. Her temperature had been normal for four days. Chemical test of the stool was negative for blood. She was discharged.

Second Admission (8 months later):

During this interim she had been entirely well and had daily carried out her household duties. There had been no abdominal distress. About twelve hours before admission she became nauseated and vomited red blood and brownish material. This continued. She felt that she had lost fifteen to twenty pounds since the previous visit.

Examination showed an obese woman in no distress. Temperature 99 F. Pulse 100. Respiration 20. Blood pressure 150/70. The head, neck, heart and lungs were not remarkable. The liver and spleen were easily palpable (there is no note as to whether or not they were larger than before, nor are they otherwise described). Pelvic was not done. The extremities were unchanged.

In the laboratory the voided urine specimen showed specific gravity 1.022, albumin and sugar negative, and 12-15 WBC, 2-4 RBC, and occasional granular casts. The hemoglobin was 10.2, RBC 3,120,000 and WBC 14,200 with polys. 78, eos. 1, lymphs, 18 and monos. 3.

Course in Hospital: She was given 500 cc. whole blood on the day of admission. This was repeated on the third day. During the first 6-8 hours she was given seven doses of buffered thrombin by mouth, vomiting after each dose. The vomitus was dark but contained no fresh blood nor coffeeground material. By the fourth day she was feeling much better. Her temperature ranged up to 99.6 F. Her blood pressure was stable around 150/90.

The cephalin cholesterol was 4+, total protein 6.4, albumin 2.5, globulin 3.9. The serum bilirubin was 0.0 direct and .2 total. The BSP was 17.4. Her hemoglobin was 11, RBC 3,640,000 and WBC 5,100 with 62 polys., 4 eos., 30 lymphs., and 4 monos. The prothrombin time was 25 seconds, control 16 seconds, and concentration 25%. The bleeding time was 1½ minutes, coagulation time 5½ minutes, and platelet count 180,880. The peripheral blood was normocytic and normochromic with a fair amount of regeneration. The platelets appeared normal. The polymorphonuclears seemed increased in number with a left shift to the stab stage and hair cells were present. The NPN was 41.

During the next week she felt quite well. Stools were negative for blood. Upper G-I tract x-ray showed normal stomach and duodenum. Additional blood counts showed WBC 8,100 and 4,300 with polys. 51 and 45, eos. 7 and 2, lymphs. 39 and 52, and monos. 3 and 1. The temperature became and remained normal. She was discharged on the thirteenth hosptial day, hemoglobin 11.2 and RBC 3,700,000.

Third and Final Admission (8 months later):

Since previous observation patient had been only fairly well, but no specific complaints were noted. At 9:00 p. m. on the night before entry she became nauseated and vomited dark ma-

terial, bright red blood, and clots. She was admitted at 7:00 a.m., having received a hypo said to be morphine.

Examination showed a drowsy middle-aged woman. Temperature 98.8 F., pulse 80, respiration 20, blood pressure 110/70. The skin had a yellowish cast but the conjunctivae were white and the mucous membranes pale. The head, neck, heart and lungs were otherwise negative. The liver was felt 2-3 fingers below the costal margin. The spleen was quite large extending 6 cm. below the left costal margin. It was smooth, firm and nontender. The abdomen was otherwise negative and the extremities were unchanged.

In the laboratory the urine was normal. The hemoglobin was 10.2 grams, RBC 3,200,000 and WBC 10,300 with 84 polys., 2 eos., 2 bas., 11 lymphs., and 1 mono. The blood chlorides were 101 meq/1 (serum under oil), the sodium 137 meq., and the potassium 4 meq. The prothrombin time was 15 seconds, control 12 seconds, concentration 50%. Bleeding time was 2 minutes and clotting time 3½ minutes.

Course in Hospital: During the first twelve hours she vomited bright blood in 50-100 cc. amounts frequently. 1500 cc's. of whole blood were given. Morphine grains 1/6, and atropine grains 1/150 were given two hours after admission, and demerol 50 mg. on three occasions in first twenty-four hours. The patient did not improve but rather became more stuporous and finally practically comatose. Her hemoglobin had been raised to 13.1 grams and RBC 4,120,000. Her pulse ranged around 140, blood pressure 150/80, and temperature up to 102 (R). The NPN was 77 and creatinine 1.3. The serum bilirubin was .4 direct and total 1.4. The CO_2 combining power was 66.4 volumes %=30 meq/1. The total protein was 6.36, albumin 2.00 and globulin 4.36. The cephalin flocculation was 4+, thymol turbidity 6, and alkaline phosphatase 1.05 BU.

During the next four or five days the patient remained in a stuporous condition. Her pulse ranged around 140, blood pressure 160/70 to 170/90, and temperature 99 to 103 (R). She moved an arm or leg occasionally. There were several involuntary small tarry stools. There was no more vomiting. Her hemoglobin was 9.8 and WBC 8,000. She was treated with intravenous fluids (glucose, saline and triple chlorides) to a total of 3000 cc. daily. Her 24-hour urine ranged from 1500-1800 cc. She received vitamin K, thiamine, ascorbic acid, oxgen, liver extract, penicillin and methionine intravenously. The blood chlorides ranged from 102 to 106 meq. (serum under oil), the sodium from 136 to 134, and the potassium from 3.6 to 4.9 meq/1. The course was downhill with deepening coma, weakening pulse and persistent temperature elevation to 102 (R). The blood pressure continued around 140/80. The hemoglobin varied from 8.8 to 11.6. The WBC rose to 18,000 and then to 27,100. Respirations became labored, rapid and then shallow. The pulse became weaker and irregular. The patient remained in deep coma, with occasional moaning. A pressure sore developed on the back. Death occurred on the ninth hospital day.

CLINICAL DISCUSSION

Doctor Caravati:

This is a problem of an elderly obese white female who succumbed following three episodes of gastrointestinal bleeding within sixteen months with no significant antecedent symptoms, the only important positive findings being an enlarged liver and spleen, with death resulting from hemorrhage and apparent hepatic failure.

There was no helpful information in her past history and no recorded data on her family or her personal life or habits.

Examination disclosed besides hepatosplenomegaly only moderate hypertensive cardiovascular disease. None of the other stigmata of chronic liver disease were present.

As the site of bleeding was in the upper portion of the genito-urinary tract only this area was surveyed by x-ray. The stomach and duodeum were negative on two examinations except for what were interpreted as enlarged gastric rugae. No statement about the esophagus is recorded but it was probably observed and no pathology found. Varices are not found in over 20 per cent of cases so we cannot rule them out.

In the absence of an acceptable history and with negative x-ray, active peptic ulcer in the stomach or duodenum is most unlikely as is gastric neoplasm. Ulcerative superficial gastritis can cause fatal bleeding and can be diagnosed only by gastroscopy.

The blood showed anemia probably due to hemorrhage, also moderate leukopenia with no evidence of any blood dyscrasia which would be responsible for the bleeding.

The chemical studies of the blood during her first admission showed prolonged prothrombin time, moderate retention of bromsulfalein, four plus cephalin flocculation, normal total protein but a reversal of the A/G ratio and no evidence of jaundice. Later studies showed a repetition of the foregoing, a slight increase in thymol turbidity and normal alkaline phosphatase. This hepatogram indicates a diffuse intrinsic hepatic disease probably of moderately long standing.

The urine showed mild renal changes and on first analysis a three plus sugar reaction was found, but later specimens showed no sugar and the blood sugar was only 122 mg.

The presence of an enlarged liver and spleen and positive laboratory evidence of extensive hepatic damage suggest that the probable cause of the bleeding was liver pathology. When fatal bleeding results from liver disease it is due to (1) erosion of a varix in the esophagus or stomach caused by portal hypertension, (2) hypoprothrombinemia or (3) diffuse oozing from many areas associated with increased capillary fragility.

The increasing splenomegaly suggests portal hypertension although ascites, jaundice and other findings often associated with this phenomenon are absent. When the splenic vein alone is involved ascites is commonly absent. However, it is probable that there is increased pressure within the entire portal circuit. By all odds, cirrhosis of the liver is the commonest cause of this but thrombosis of the portal or splenic vein (due to clot or neoplasm) or some defect in the vein such as cavernous transformation or phlebosclerosis may cause portal hypertension. The latter processes are extrahepatic but this case shows definite evidence of intrahepatic pathology. It is therefore thought that chronic hepatic disease is the most likely cause of the pathology.

If cirrhosis exists what were its cause and type? There was no history of exposure to chemicals nor of alcohol intake. We have no data to incriminate the infectious agents such as lues, schistosomiasis, virus or amebic hepatitis or bacteral infection. A serology test for syphilis was not performed. A diagnosis of luetic hepatitis is not possible without a positive Wassermann and even when this is present we cannot conclude that syphilis is the cause of the cirrhosis unless improvement is noted with antiluetic therapy. About 15 per cent of patients with cirrhosis have lues but in only a small per cent of these is syphilis the cause of the fibrosis. We cannot rule out a gummatous liver with fibrosis as the cause of this pathology. She gives no history of antecedent acute liver disease which could have resulted in chronic cirrhosis.

Of the metabolic causes of cirrhosis the most common is hemochromatosis, so-called "bronze diabetes." It is a benign and slowly progressive process due to faulty iron metabolism and the consequent deposition of hemosiderin and hemofusein in many tissues. The patient had glycosuria when first seen but it was not found again. About 75 per cent of patients with hemochromatosis have glycosuria and hyperglycemia. This disease is most uncommon in the female (only 5 per cent) and is rare after the age of sixty. These facts and the absence of skin pigmentation (found in 84 per cent of cases) and the lack of an established diagnosis of diabetes make it indeed unlikely.

Amyloidosis should be mentioned but can be dismissed because of absence of a long standing chronic illness and lack of evidence of generalized amyloidosis. It has, however, been noted in gumma of the liver.

Cardiac cirrhosis or, more properly, cardiac fibrosis, occurs only in cases of long standing heart failure.

Biliary obstruction may cause a special type of cirrhosis. The absence of jaundice and of other evidence of common bile duct obstruction and the hepatogram rule it out in this case (a group of clinical findings).

Banti's syndrome is the presence of splenomegaly, anemia and leukopenia, all of which are present in this patient. It is usually a secondary disorder due to some obstruction of the venous outflow from the spleen. This obstruction is most often due to portal cirrhosis but can be caused by portal or splenic thrombosis or pressure on the vein by neoplasm or intrinsic defect of the vein. We cannot rule out the presence of splenic vein thrombosis but intravascular clot within the portal vein probably can be excluded because of the absence of ascites, jaundice, et cetera.

Could malignancy be the cause? Secondary metastasis to the liver from any organ may produce hepatomegaly but causes splenomegaly only when other metastases are present. It is possible that a small gastric tumor which could cause the bleeding may not be visualized by x-ray but nevertheless may metastasize to the liver. In view of her fair health for sixteen months after the first hemorrhage and her failure to localize a primary lesion this is not a likely probability. Cancer of the pancreas could invade the lower duodenum and cause hemorrhage and metastasize to the portal vein and cause the hepatosplenomegaly and also produce transitory glycosuria. However, laboratory evidence of diffuse intrinsic liver disease usually is absent and jaundice commonly is present. Primary cancer of the liver undoubtedly could be a factor. It occurs in livers already the seat of cirrhosis and progresses quite rapidly. Most often there is rapid accumulation of ascites and jaundice, an increase in pain and an increased alkaline phosphatase test, none of which were recorded in the protocol. A metastatic hepatoma could invade the splenic vein and produce a picture such as this patient presented. Although this is a possibility the data we have does not permit us to make it more than that.

The leukemias, lymphomas (particularly Hodgkin's disease), sarcoidosis, tuberculosis and Felty's syndrome all may cause hepatosplenomegaly, but the clinical and laboratory evidence does not suggest their presence.

What was the immediate cause of death? The third episode of bleeding was intractable and uncontrollable and undoubtedly was a major factor in the production of the final fatal illness. However, the restlessness, stupor and coma, together with increasing fever, in spite of a hemoglobin of 13 gms. and with essentially normal electrolytes suggest that she died of hepatic decompensation. Anoxemia, the result of hemorrhage and opiates are two of the most potent causes of hepatic injury to an already damaged liver. Regardless of the comatose state opiates were administered as much as four doses within twenty-four hours after the final admission and following their administration, stupor was more profound and prolonged even though her hemoglobin increased. It is not unusual to witness a patient mildly drowsy and restless from partial liver failure progress to entire unconsciousness when a single dose of opiate is given, because of the inability of the damaged hepatic parenchyma to detoxify the drug.

When the coma deepened, it was found that her blood nonprotein nitrogen had risen; however, the urinary output continued satisfactory. It is believed that the azotemia was extrarenal resulting from the blood within the alimentary tract and not related to renal failure.

In the final few days fever increased and leukocytosis reached 27,100. This is often seen as an agonal finding in fatal hepatic failure and is often associated with massive necrosis of liver cells.

In conclusion, I believe that this patient most likely had portal cirrhosis with varying degrees and types of regeneration and with terminal hepatic necrosis and congestive splenomegaly and that the bleeding probably was from dilated and eroded veins in the esophagus or upper third of the stomach (reported as large rugae on x-ray). However, I would not be surprised if the pathologist reports only congestion in the proximal position of the stomach and was unable to find any specific site of the hemorrhage.

I cannot determine the etiology of the cirrhosis. Lues is a distinct possibility as is some extensive disease of the portal vein but I cannot convict either.

Cancer may have been present but there is not decisive data to substantiate the diagnosis.

The kidneys probably were the seat of moderate renal sclerosis, reflecting the general vascular degeneration and there was likely a low grade type of lower nephron nephrosis often seen in fatal hepatic disease.

CLINICAL DIAGNOSES

Bantis Syndrome
Hepatic Cirrhosis
Esophageal Varices & Hematemesis
Osteoarthritis, Lumbar Spine
Hypertensive Heart Disease

DOCTOR CARAVATI'S DIAGNOSES

Portal Cirrhosis (Cause Undetermined)
Hepatic Necrosis
Varices—Esophageal or Stomach
Congestive Splenomegaly (Bantis Syndrome)
Arteriosclerosis, Focalization in Kidneys
Hepatic Failure

Pathology Report

Doctor Apperly:

The pathologic changes found at autopsy were as follows: Externally, moderate edema of the legs and hands together with external hemorrhoids, as described in the clinical report. On section the liver was found to be of normal weight (1440 grams); it extended some 4 cm. below the costal margin and externally and on section was made up of small hyperplastic nodules, 2 to 8 mm. in diameter and surrounded by fibrous tissue, typical of Laennec or portal cirrhosis. There was also a thrombus, apparently recent, filling the portal vein, some of its branches in the liver, and the adjacent 3 cm. of the splenic vein. The spleen was enlarged three times, weighed 410 gm. and showed chronic venous congestion, with a few small areas of old hemorrhage, surrounded by fibrous tissue more or less stained with hemosiderin.

In the gastrointestinal tract there were branching and varicose submucosal veins, especially in the region of the cardiac end of the esophagus, but no bleeding points; external and internal hemorrhoids; a small recent and acute duodenal ulcer, 2.5 cm. in diameter, with a black or dark red floor, indicating recent bleeding but with no induration; there was no obvious blood in the intestinal contents, but a mass of black tarry stools occupied the splenic flexure. The peritoneal cavity contained some 3500 cc. of clear watery fluid.

In the cardiovascular-renal system, the kidneys were of normal weight, 125 gm. each, of mildly granular surface and microscopically showing a few fibrosed glomeruli and small scars, i. e., hypertensive or benign nephrosclerosis; the heart, 390 gm., was enlarged about 1.3 times, mostly due to left ventricular hypertrophy; the aorta,

coronaries and other main arteries showed moderate atherosclerosis.

The lungs showed moderate edema and congestion, more especially in the right lower lobe. The ovaries were small and fibrosed. The uterus was also small and atrophic but microscopically the endometrium showed a well marked cystic hyperplasia. Examination of the head was not permitted.

(Lantern slides of the microscopic structure of the liver, kidney and endometrium were shown).

In the last lantern slide we have made an attempt to correlate the physiologic, pathologic and clinical features of hepatic cirrhosis. (See Chart No. 1).

CHART NO. 1

DAMAGE TO THE LIVER CELLS

1. Failure to manufacture or store certain substances:
   fibrinogen, prothrombin → bleeding
   serum albumins → hypoproteinemia, edema, ascites
   antianemic factor (vit. B_{12}) → macrocytic anemia
   hipuric acid test (with sodium benzoate)
2. Failure to destroy or excrete certain substances:
   amino acids and toxic substances → capillary injury, ecchymoses, albuminuria, visceral congestion, stupor
   bromsulfphtholein (BSP) excretion by RES (Kupffer cells) estrogens → loss of masculinism, hypertrophic endometrium
3. Compensatory hyperplasia of hepatic cells and fibrous tissue with distortion or pressure on vessels and ducts:
   portal obstruction → splenomegaly, visceral congestion,
   varices of hemorrhoidal,
   esophageal and umbilical veins
   biliary obstruction → icterus, fatty pale stools, et cetera.

There are two lesions of some interest associated with the hepatic cirrhosis in this case: (a) The acute duodenal ulcer. Although the complete story of acute peptic ulcer is unknown, it seems to be generally or always preceded by hyperemia and hemorrhage into the mucosa. However, I am not aware of anything in the literature about duodenal ulcer following the duodenal hyperemia of hepatic cirrhosis, but I have recently heard of two such cases in addition to this one. (b) The cystic hyperplasia of the endometrium in this 69 year old woman, with fibrosed ovaries, is unexpected. We have had other similar instances in the last year or so. Obviously there is a persistent hyperestrinism, and we can only believe that its source is in the adrenal cortex and that the liver, owing to chronic disease, is failing in its normal function of excreting or destroying estrogens.

In summary, this is a case of portal cirrhosis of the liver, in which are exhibited the changes brought about by the failure of the organ's metabolic functions, the attempts of the portal blood to bypass the liver and, in addition, an acute duodenal ulcer and an endometrial hyperplasia.

CONCERNING THE MANAGEMENT OF FRACTURES BY SKELETAL PINNING AND EXTERNAL FIXATION

By Wayne Branaugh, M. D.,
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There are two principal reasons why most surgeons are reluctant in adopting skeletal pinning and external fixation as the treatment of choice in the majority of difficult fractures involving the long bones.

The first reason is the fear that a certain number of bone infections will occur at the pin site in the bone. The pin traverses the skin and soft tissues to reach and transfix the bone. It remains in this position until bony union has occurred which requires from three weeks in some fractures to four or five months in others. The fear that organisms will travel from outside inward and lead to bone infection which will persist after the pin is removed is hard to overcome in the minds of those who have not had experience in the management of fractures by skeletal pinning.

The wound produced by the pin (which exists until the pin is removed) is an open wound and must remain open so that drainage, should it occur, will be free toward the external surface. There will be a very small amount of drainage, or pin seepage, at pin sites where the skin lies close to bone. At these sites there is a very small amount of soft tissue between the skin and the bone and very slight movement of the skin upon the bone with movement of the proximate joint. On the other hand there will be more drainage as the reverse of the foregoing is true, namely, when there is more movement of the soft tissues at the pin site.

An example of the first pin site is one two fingerbreadths above the ankle and an example of the second pin site is one in the proximal femur. Tight, firm dressings about the pin sites to prevent crawling of the soft tissues on the pin will lessen drainage to a negligible degree. There is no doubt but that an occasional organism will travel inward against the current of lymph flowing outward and reach the bone. This low grade infection will in some cases aid in bone necrosis about the pin and cause it to become loose.

Pins placed in bone without enough friction to cause sufficient heat to destroy bone cells and which escape the invasion of organisms traveling from the skin surface inward always remain as nearly tight as a nail in wood for an indefinite length of time. By the time organisms have

traveled inward to reach the bone against the lymph current flowing outward there has been a protective reaction set up against the pin in the bone by the body's defense mechanism so that infection rarely invades the bone. The discharge always present at pin holes and always in proportion to the movement of the soft tissues upon the pin is not pus but mostly lymph containing exudative cells and some low grade organisms. If this drainage is prevented by drying of the exudate and sealing of the exit at the skin surface a collection of the material will occur in the pin hole about the pin and infection in the soft tissues is very likely to occur with its concurrent signs of inflammation. If the pin hole in the skin is not allowed to become sealed by drying exudate and if the movements of the soft tissues upon the pins are kept at a minimum and if excessive heat has not been created in introducing the pin, there should very rarely be a residual bone infection at a pin site following the removal of a pin.

If, in this day of antibiotics, there is ever any sign of infection either in bone or soft tissues the antibiotics should be administered. Residual bone infection after the removal of a pin is certainly a rarity in my practice. It has occurred only once in approximately 100 fractures treated by skeletal pinning. A soft tissue abscess formed in the pin track three weeks after removal of the pin. X-ray revealed an area of bone necrosis at the pin site in the bone. The abscess was drained in the office and the patient was given sulfathizole for five days. The wound healed in two weeks and x-ray three months later revealed the area of necrosis to be filled with solid bone.

The second reason is that the proper equipment is not available and that the management of fractures by this method has not been taught and learned. It is true that the cost of paraphernalia for the treatment of fractures by skeletal pinning and external fixation is high but not too high if difficult fractures can be managed to better advantage by its use. After the initial investment the cost for replacement and upkeep is very small.

The fact that the method is frowned upon or feared by some surgeons is not adequate reason for its condemnation by them either privately or publicly. Adverse criticism should not be given on the basis of personal opinion formulated without experience. Such criticism should be based on personal experience or on observation of the results of others skilled in its use.

Skeletal pinning and external fixation is a highly specialized method in the management of fractures. It must be studied and learned by the orthopedist as well as by the general surgeon. I am convinced that the reasons for complications and failure to secure good results are:

1. Improper knowledge of the basic principles involved in the management of fractures in general.
2. Improper knowledge as to the proper pin sites at which to place pins and the method of placing pins in the various fractures.
3. Lack of natural mechanical ability in placing pins, placing bars and clamps and operating the reduction machine if used.
4. Lack of proper check-up x-rays to determine position of the fragments and whether there has been absorption of the fragment ends resulting in distraction.

Certainly this is not a method to be adopted by anyone who is not fully qualified in the management of fractures by other methods, including open reductions with internal fixation. When the treatment of fractures by skeletal pinning and external fixation is learned by competent surgeons they will have an asset which will be of value to them in the management of their most difficult fractures.

Why the treatment of fractures by skeletal pinning and external fixation is not taught in our medical schools as one of the methods of management of fractures is difficult to understand. The method at this time is being treated like spinal anesthesia was treated in the twenties. It is being stiff-armed by the very men who should be working hard to make it more perfect in its application. In time it will occupy one of the most important positions in the treatment of fractures because it offers an excellent means of reduction, maintenance of reduction, control of fragments and restoration of function.

WILLINGNESS AND DETERMINATION NECESSARY

The deteriorated alcoholic is not a favorable subject for antabuse treatment; the patient with visceral disorder must be rejected lest likelihood of fatal terminations face the therapist. Furthermore, no patient should be accepted for treatment unless he has a convincing willingness and determination to prepare for an ever sober life.

When the drug is taken in 0.5 gram doses once per day in tablet form, the patient is given an extra handle, so to speak, with which to combat safely the inevitable wavering at some time or another in his future. The therapist can derive deep pleasure when, as happens occasionally, a patient comes to report frankly and proudly that he, though taking his medicine regularly, did want to just try a swig and adds, "Oh, Doc, it didn't taste right, I just did not want any more of it—I guess I will make it."—J. C. Michael, M. D., in Minnesota Medicine.

THE THERAPEUTIC DOCTOR WATSON

By Edward J. Von Liere, M. D.
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"I did what I could to relieve his pain."—John H. Watson, M. D.

John H. Watson, M. D., the chronicler of Sherlock Holmes, practiced medicine in the city of London in the early eighties of this past century. This was a long time ago—nearly seventy years. At the time of which we write Roentgen had not as yet discovered the x-ray, and Ehrlich's "606" (salvarsan) was not available for the treatment of syphilis. Banting and Best, the Canadian physiologists, had not given insulin to the world nor had Minot and Murphy of Harvard discovered that liver extract was an efficient agent in the treatment of pernicious anemia, a heretofore fatal blood disease. The sulfonamide drugs and the antibiotics such as penicillin and streptomycin presumably were only a dream.

From what has been related it appears that Doctor Watson's therapeutic armamentarium in so far as efficacious drugs were concerned was sadly limited. But the fact must not be forgotten that he had at his command a number of powerful medicines, to name a few, morphine, cocaine, belladonna and strychnine.

If the stories of Sherlock Holmes be reviewed, interesting references—although not as many as we would like—to therapeutic agents used by Doctor Watson may be found. It is not only of cultural and historic but of scientific interest as well, to draw attention to these. It is known that Sir Arthur Conan Doyle, the creator of Sherlock Holmes and Doctor Watson, pictured faithfully the manners and practices of his day. This lends authenticity to our study. He was, furthermore, a keen, intelligent, well trained physician who was not only familiar with the drugs used by the practitioners of medicine in London and Edinburgh but, because of his postgraduate work in Vienna, knew which therapeutic agents were in favor on the continent.

Let us turn to his delightful stories of Sherlock Holmes and see what medicines Doctor Watson used in his practice and under what conditions they were employed.

It appears that he evidently used iodoform and silver nitrate, for Holmes on one occasion remarked to him: ". . . if a gentleman walks into my rooms smelling of iodoform, with a black mark of nitrate of silver upon his right forefinger . . . I would be dull indeed if I do not pronounce him to be an active member of the medical profession".[1]

Iodoform is but little used today. It was introduced as an antiseptic about the year 1879. For many years it was widely used as a dusting powder, especially to diminish infection of open wounds and to promote granulation. Its persistent and penetrating odor as well as its relative ineffectiveness gradually brought it into disfavor. This is probably just as well, for its use is not entirely without danger, especially when iodoform is applied over an extensive raw area where a good deal of it can be absorbed. I believe it is still used by some veterinarians.

Silver nitrate still enjoys a wide usage. It is employed to produce astringent, antiseptic and caustic effects. Even many laymen know that silver nitrate will remove "proud flesh". Unfortunately it has the property of staining the skin "with a black mark" (as Holmes remarked), which incidentally is often difficult to remove. It may persist until it is virtually worn off, although recent and superficial stains can be removed by painting the area with a 10 per cent solution of potassium iodide.

As might be expected, Doctor Watson found it necessary on several occasions to resort to the use of morphine to alleviate pain. We find, for example, that when Kitty Winter, the cast-off mistress of the infamous Baron Gruner, threw vitriol in the Baron's face,[2] Doctor Watson, who was present when it happened, administered a hypodermic of morphine to the wretched Baron to ease the intense suffering. On another occasion when Professor Presbury, the famous physiologist[3] was savagely attacked by his wolfhound, Watson immediately gave morphine to the unfortunate Professor. In still another instance[4] when Carlos, the mastiff, had attacked the villainous Rucastle, Watson probably would have used morphine had he had it in his possession. He wrote: "I did what I could to relieve his pain." He did not state, however, what agent he employed.

On one occasion at least, it was necessary to administer morphine to Sherlock Holmes. He had been attacked and beaten severly by two ruffians[2]. Sir Leslie Oakshott, the eminent London surgeon, had been called in. He later remarked to Watson: "Two lacerated scalp wounds and some considerable bruises. Several stitches have been necessary. Morphine has been injected. . ."

Morphine because it is a dangerous habit-forming drug should, of course, be used only when absolutely indicated. It is noteworthy that Doctor Watson administered morphine only when the patient had suffered a grave physical

[1]A Scandol in Bohemia.
[2]The Adventure of the Illustrious Client.
[3]The Adventure of the Creeping Man.
[4]The Adventure of the Copper Beeches.

injury. He is to be commended for his conservative attitude.

On many occasions when assisting Sherlock Holmes with his famous cases, Doctor Watson found it necessary to administer a stimulant to those individuals who had suffered a physical injury or who had been under great emotional stress. His favorite remedy for such conditions was brandy. Numerous instances may be cited when this agent was employed as an emergency measure*. Doctor Watson obviously believed firmly in the efficacy of brandy as a stimulant and, indeed, claimed that he once had saved the life of an individual by its use. "Mr. Melas, however, still lived, and in less than an hour, with the aid of ammonia and brandy I had the satisfaction of seeing him open his eyes, and of knowing that my hand had drawn him back from that dark valley in which all paths meet."[5] Sir Arthur Conan Doyle in this beautiful pasasge expresses the wish of every physician, namely, to save the patient's life.

Brandy and whiskey were not the only stimulants used by Doctor Watson; in point of fact he employed several others. We have noted previously that ammonia was administered along with brandy to Mr. Melas, the Greek interpreter. Physicians will remember that ammonia is the principal ingredient in so-called smelling salts. The vapors of ammonia when inhaled stimulate the medullary centers causing an increase in respiration, and by action on the vasomotor center cause a rise in blood pressure.

In his heroic efforts to save the life of a woman who had been chloroformed nearly to death[6] Doctor Watson gave ether intravenously with successful results. At any rate he records that the patient regained consciousness. Ether is not often given in this manner as a stimulant and the question could well be raised whether it was indicated under the conditions which faced Doctor Watson. I am afraid that this was an instance in which the patient lived in spite of the treatment.

A popular and effective stimulant, namely, caffeine, was used to bring a young woman out of a stuporous state which had been produced by opium. Doctor Watson wrote: ". . . a couple of cups of the strongest coffee soon cleared her brain from the mists of the drugs."[7] Doctor Watson used the classical agent. Strong coffee is still used today in morphine poisoning, although relatively new preparations such as metrazol, nikethamide and amphetamine are at present the drugs of choice. Coffee is, of course, easy to obtain, is a relatively harmless stimulant and has the pleasing virtue of not producing disagreeable after-effects.

On one occasion the nature of the stimulant administered was not disclosed. We find the following: ". . . while his nurse poured him out a glass of some stimulating medicine."[8] We can only guess at the contents of the glass, but more than likely it contained either brandy or whiskey. We have previously pointed out that these agents were frequently prescribed as stimulants.

Doctor Watson strangely enough administered amyl nitrite to a patient who presumably was suffering from catalepsy. He wrote: "I had obtained good results in such cases by the inhalation of nitrite of amyl . . ."[9] It will be recalled that this rather rare condition is characterized by a rigidity of all the skeletal muscles; the patient as a consequence tends to remain in any position in which he is placed. The reason Doctor Watson used amyl nitrite in this instance is not clear. The nitrites are frequently prescribed to reduce systemic blood pressure or to relieve angina pectoris. Surely there is no evidence in the literature that the nitrites are of aid in cataleptic states. We can dismiss the matter by assuming that in this instance Watson used amyl nitrite empirically.

Oil is mentioned as a therapeutic agent in at least two of the short stories of Sherlock Holmes. Both Doctor Watson and Sherlock Holmes had occasion for its use. When Baron Gruner had vitriol thrown in his face, Doctor Watson tried to alleviate the poor wretch's pain: "I bathed his face in oil, put cotton wadding on the raw surfaces. . ."[2]

On another occasion Sherlock Holmes relates how he treated MacPherson who had come into contact with *Cyanea Cappillata*, a giant jelly-fish. "Pads of cotton wool soaked in salad oil seemed to take the agony from the strange wounds."[10] This adventure took place in the country and we may assume that there was little, if any, medication on hand. The patient was suffering intensely and Holmes did what he could to assuage the pain with the material he had at his disposal. He showed real ingenuity by making use of a homely preparation. Morphine obviously was badly needed here and it is a pity that Doctor Watson was not there to administer it, but it must be remembered that at the time this happened Holmes had retired to the Sussex Downs and Doctor Watson was in London. A perusal of the story shows, however, that the patient had been given liberal quantities of brandy, so that perhaps he got along fairly well without morphine after all.

*Brandy, Doctor Watson's Fovorite Remedy. In Press, "The Baker Street Jaurnal".
[5]The Greek Interpreter.
[6]The Disappearance of Lady Francis Carfax.
[7]The Adventure of Wisteria Lodge.
[8]The Naval Treaty.
[9]The Resident Potient.
[10]The Adventure of the Lion's Mone.

Doctor Watson used carbolized bandages to dress the hand of the unfortunate hydraulic engineer who had, a few hours previously, lost his thumb in an adventure which nearly cost him his life. "I sponged the wound, cleansed it, dressed it, and finally covered it over with cotton wadding and carbolized bandages."[11] Carbolized bandages are no longer used in present day surgery. Historically it is of interest to record that carbolic acid became widely known as an antiseptic through its introduction by Lister in 1867.

Sir Arthur did not often mention hypnotics. We find in one of his short stories that it was the custom of an invalid (Mr. Percy Phelps) to take some sleeping potion: " . . . . you did not take your usual draught that night."[8] We will never know what the "usual draught" contained. The barbiturates which are so widely used today were unknown when Doctor Watson practiced medicine. Bromides were employed not only for sedation, but for inducing sleep as well. The draught might have contained chloral hydrate for it once enjoyed wide usage as a hypnotic. It is a potent and dangerous drug and, as generally known, is used by gangsters in what are inelegantly but expressively referred to as "knock out drops."

An interesting reference is found to an alterative in one of the short Sherlock Holmes stories. Holmes meeting Watson in an establishment which specialized in Turkish baths asked the good doctor why he insisted upon this type of therapy. The latter replied: "A Turkish bath is what is called an alterative in medicine—a fresh starting point, a cleanser of the system."[6] An alterative is defined in Webster's unabridged dictionary as: "A medicine or treatment which gradually induces a change, and restores healthy functions without sensible evacuations." A modern medical dictionary* states: "An obsolete term originally used for drugs said to reestablish healthy functions of the system."

Present day medical students probably have never heard of alteratives; many middle-aged physicians, however, will remember them well, for formerly they were used extensively in therapeutics and included the following preparations: iodine, arsenic, iron and the compounds of mercury. Nowadays a more scientific attitude is taken toward these agents and they are prescribed only if there is a specific need for them, for example, iron for certain anemias, mercury for syphilis, and so on. If one considers the esteem in which alteratives were held in the latter part of this past century and, for that matter, in the early part of the present one, it is surprising that Sir Arthur did not mention them more frequently in his writings.

One wishes that Sir Arthur had mentioned other drugs used by Doctor Watson in his practice. In the early part of the 20th century a survey in England showed that physicians considered that from 30 to 35 drugs were necessary to practice medicine satisfactorily. In his stories of Sherlock Holmes, Sir Arthur mentions about a dozen. He, of course, did not write his detective tales especially for members of the medical profession and probably mentioned only those drugs with which many laymen are familiar.

Drugs are, of course, an important part of a doctor's armamentarium, especially those who are engaged in general practice. From the evidence at hand obviously Doctor Watson was not a therapeutic nihilist, but neither can he be accused of prescribing drugs loosely or in excessive doses. The matter of overdosing with drugs calls for a brief comment. The famous poet-physician, Oliver Wendell Holmes, wrote: 'If the whole materia medica (excepting only opium and ether) as now used could be sunk to the bottom of the sea; it would be all the better for mankind—and all the worse for the fishes." These were harsh words, but when written were timely. The indiscriminate use of drugs was directly responsible for the genesis of the ill-conceived homeopathic system of medicine founded by Hahnemann. The followers of this school, however, used drugs in such minute doses that they were virtually ineffectual. It is, indeed, an ill wind which blows no good, for the rise of homeopathy had a sobering influence on many physicians of the allopathic school who were using drugs lavishly, but not well. Be that as it may, let us not forget that the prescribing of drugs plays only a part—albeit an important one—in the successful practice of medicine.

In conclusion, we may think of Doctor Watson briskly setting out to answer the call, carrying his trusty bag filled with the recognized and popular drugs of that period. He undoubtedly prescribed these fairly liberally, and firmly believed in their curative powers. Most of Doctor Watson's patients probably got well with the aid of, or perhaps in spite of, his prescriptions. Those individuals, we may be sure, who were not benefited by his medication, were cheered by his kindliness, by his sympathetic understanding of their ailment, and by his manly personality. He gave them of his best. No man can do more.

[11]The Adventure of the Engineer's Thumb.
*The American Illustrated Medical Dictionary. W. B. Saunders Co., Philadelphia, 1947.

THE DIAGNOSIS OF DISEASES OF THE PANCREAS*

By James O. Burke, M. D.
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Increased interest in diseases of the pancreas has been manifested recently. In regard to diagnostic features we have reviewed our recent cases. Twelve cases of acute pancreatitis, twenty-one admissions in fourteen patients with chronic relapsing pancreatitis, and three patients with primary carcinoma of the pancreas have been studied. We have not included such conditions as aberrant pancreas or primary disease of islet cell tissue.

ACUTE PANCREATITIS

In the group of 12 patients with acute pancreatitis the ages varied between twenty-four and sixty, 11 being under forty. The duration of symptoms prior to admission was from three hours to six days. Five of these patients had recurring attacks which are included in the chronic relapsing pancreatitis group.

Four patients in the group observed were operated upon and hemorrhagic or fat necrotic lesions were observed. Two of these patients died. None of the other patients died and it can not be said with any certainty that any of those not operated upon had hemorrhagic lesions. They may have had the acute edematous variety of pancreatitis. This feature has been commented upon by Elman[1] and others. Since operative treatment of acute pancreatitis usually is withheld except in case of complications, mortality figures can not be readily compared.

While the serum amylase was elevated in all cases, the degree of elevation can not be accurately correlated with severity of the illness. An elevated serum amylase remains as the best laboratory evidence of acute pancreatitis. It is practically always elevated during the first hours and may remain elevated for a day or more. There may be some correlation between the persistence of elevation and severity of symptoms but not invariably, since some cases present normal amylase values preceding death. Conversely, a slightly elevated serum amylase may not necessarily mean acute pancreatitis. Other upper abdominal conditions, notably perforated ulcer, may cause the elevation. Other laboratory aids in diagnosis are: blood and urine sugar determinations, urine amylase, serum calcium, x-ray studies and electrocardiography.[2a, 3]

It is of particular interest that eight of the twelve patients had drunk large amounts of alcoholic beverages and four had varying degrees of delirium tremens associated with the attack. This association with alcohol has been stressed.[2b, 3]

Hyperglycemia and glycosuria indicate temporary or permanent islet cell impairment. An elevated urine amylase has the same significance as the serum amylase, but urinary amylase determination rarely is done and its value is apparently limited to those cases in which the serum amylase happens to have fallen by the time it is determined. A low serum calcium which may be associated with clinical tetany may persist for as long as ten to fourteen days following the onset of an attack and is a confirmatory sign. The x-ray offers more in eliminating free air under the diaphragm although calcification of the pancreas or alterations in the duodenal arc are of positive significance. The electrocardiogram may reveal changes secondary to a low serum potassium associated with the vomiting or diarrhea of an acute attack.[4] The electrocardiograph also is of value in differential diagnosis in some cases.

RECURRENT PANCREATITIS

The term "chronic relapsing pancreatitis" probably should be reserved for the cases with demonstrated pancreatic insufficiency. "Recurrent acute pancreatitis" might be the term applied to those cases with recurrent episodes which do not demonstrate pancreatic insufficiency. A clear-cut distinction has not always been made in the literature. In one series of eighty-five cases reported by Probstein and others,[5] it was noted that the disease recurred in about half but that in no case was progression to chronic pancreatitis seen; however, practically all other observers believe that recurring acute attacks eventually may lead to chronic disease.[2c] We have seen twenty-one episodes of pancreatic involvement associated with symptoms and signs of diseases in fourteen patients. Five were previously diagnosed as acute pancreatitis and included in that group, and were later seen in a recurrence. Nine others were diagnosed on history of recurrence with evidence of pancreatitis to serum amylase determination, or definite evidence of pancreatic insufficiency. Pain is the chief feature in the history of these patients, and it was the presenting symptom common to all cases. The pain was epigastric or right upper quadrant in lo-

*Presented before a joint meeting of the West Virginia Heart Association, the Section on Internal Medicine and the West Virginia Chapter of the American College of Physicians, held in connection with the 83rd Annual Meeting of the West Virginia State Medical Association, at White Sulphur Springs, July 28, 1950.

cation in most cases, commonly radiating to the back. It usually was severe, steady, or crescendo-like, but not cramp-like, and lasted several days. The similarity of this pain to biliary colic has been commented upon by many.[7,8,9] The persistence of the pain may distinguish it from biliary colic.[10] Nausea, vomiting, fever and malaise also may occur, but do not appear to be of differential significance. Age variation was from twenty-four to sixty years, one-half were over forty years. The duration of symptoms varied from one year to twelve years. Seven of the fourteen patients were alcoholics, and alcoholism was a feature of ten of the twenty-one admissions.

There were two patients who previously had undergone cholecystectomy, and three others whose gall bladders did not visualize; in none of the latter was there jaundice. The differential diagnosis of gallbladder disease may be difficult. In fact, definitely associated biliary tract disease is reported in many cases. Gambill, Comfort and Baggenstoss[8, 9] have reported twenty-seven such cases. In this regard the interrelationship between biliary tract disease, and pancreatic disease has been frequently noted, [2d, 6, 8, 9, 11, 12, 13] and the etiology of pancreatitis in association with the "common channel" has been cited.[6, 12, 14] However, the correct diagnosis is made upon finding an elevated serum amylase or lipase, or diminished duodenal amylase, or other evidence of pancreatic disease. Pancreatitis as the actual cause of postcholecystectomy syndrome has been noted.[2e, 6]

In this group of fourteen patients there were four who exhibited diabetic type glucose tolerance tests and two who had frank diabetes requiring insulin. In one of the latter the diabetes was noted to improve or require no insulin. As in acute pancreatitis, the diabetes may be transient. The development of true pancreatic diabetes in persons with acute pancreatitis has been noted many times by various authors.[2f 15, 16, 17, 18]

According to Sprague, Thomas Cawley, an English physician, in 1788, described a patient "seized with diabetes" who later died of typical relapsing pancreatitis, being the first such case reported. The time element for the development of diabetes may be short. On the other hand, diabetes may not occur until after many years of pancreatic disease. It is said that 90 per cent of the islet tissue must be destroyed before diabetes becomes clinically manifest.[16]

Calcification of the pancreas occurred in one of our cases. This finding is a helpful aid, but all cases of pancreatic calcification do not have other evidence of pancreatic disease.[19] However, some of the most severely painful recurrences of pancreatitis are associated with calcification within the gland.[20, 21, 22]

Cysts of the pancreas may occur during the course of pancreatitis. Two of our patients presented large cysts.

A commonly-thought-of finding, steatorrhea, was not seen in our series, and steatorrhea usually is a very late finding.[10] A case is cited by Comfort[15] in which calcification appeared after nineteen years of the disease, diabetes after twenty-two years and steatorrhea after twenty-five years.

CARCINOMA OF THE PANCREAS

Carcinoma of the pancreas was seen in three proved cases. These patients were fifty-nine and sixty years of age. Their symptoms, always pain, were from two to seven months' duration prior to diagnosis and they lived from six weeks to seven months after diagnosis. This is a dismal outlook. None of these had jaundice until late, the disease in these cases being primarily of the pancreas body and tail. One patient's first symptoms, other than pain, were associated with diabetes and led to that diagnosis.

From our own experience we are impressed with the nature of the pain, the emotional disturbances and the weight loss. These features have been stressed by others.[23, 24, 25, 26] In cases in which the head of the pancreas is involved and jaundice is present pain precedes the jaundice, while in carcinoma of the ampulla the jaundice precedes the pain.

The pain of pancreatic carcinoma may not be epigastric but may be lower abdominal, in the flank or in the chest. (It occurred thoracically in four of the seventy-five cases of Arkin and Weisberg.[24]) The pain is dull and continuous or becomes aggravated by motion, or aggravated without known provocation. It may appear to be relieved by drugs, yet again in the same patient the same drug may not relieve it. It may disappear for days without obvious cause. The patient may be doubled over with excruciating torture. Along with this he may be depressed and may evidence such emotional disturbance that the psychiatrist is called in consultation.[25] Several such patients have even been treated as primary psychiatric casualties.[1] Thrombosis of peripheral vessels may be the initial manifestation of the disease.[1] In spite of all this, there may be no other definite evidence of organic disease. The relatively late x-ray finding of displacement of the duodenum or stomach is well known.[26] All x-ray and laboratory tests, with

the possible exception of amylase and lipase studies, may be normal.[10, 23]

A high amylase value due to obstruction of the ducts may lead to the early diagnosis of carcinoma of the head of the pancreas, and persistently low amylase values may lead to the diagnosis of carcinoma of body and tail of the pancreas.[34]

Agren and Lagerlof,[27] Comfort, Parker and Ostoberg,[28] Diamond and Siegel,[29] Gambill, Comfort and Baggenstoss,[8] Doubliet,[30] and others, have shown the value of studying duodenal amylase and lipase in pancreatic disease. Serum amylase or lipase response tests have been devised by Lagerlof,[31] Knight, Muether and Sommer,[32] Myhre, Nesbitt and Hurly,[33] and Burke, Plummer and Bradford.[34]

SUMMARY

The clinical features in the cases of 36 patients hospitalized for pancreatic disease are reviewed. The study of duodenal and serum amylase or lipase appears to be the most significant means of earlier and more accurate diagnosis.

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NATURE BECKONS

Nature is neither moral nor immoral. She is never pestered with a conscience. She never lies awake at night weeping for her sins. The fury of the mob, the schemes of the capitalists, the rottenness of the big cities, the lies of the demagogs, bloody war and its unspeakable human folly were as but light dust in the balance of the cosmos. I could lose myself in the cool deep recesses of the forest and forget them all. —J. N. Mecklin, M. D., in The Mississippi Doctor.

PRIMARY BENIGN TUMOR OF THE URETER

Case Report*

By John F. McCuskey, M. D., E. Burl Randolph, M. D. and Herman Fischer, M. D.
Clorksburg, W. Va.

Primary tumors of the ureter are extremely rare. Lazurus was able to collect only 183 cases.[1] These occurred in the male in a ratio of 2 to 1 with the highest frequency in the sixth and seventh decade of life. These tumors arise from the lining epithelium or from the wall of the ureter. Since most of them occur in the lining, they give rise to carcinomas of the epidermoid variety. Of these primary tumors, by far the least common are the benign varieties. Edelstein and Marcus[2] in a recent review of the English literature collected only 32 cases. Benign tumors may be fibromas, myomas, fibromyomas and angiomas. So far as is known our case brings the total of benign ureteral tumors to 33.

CASE REPORT

The patient was a 59 year old white trainman who enjoyed good health until two years prior to his hospital admission. His chief complaint was a dull aching pain in the left flank centered for the most part in the costovertebral angle. He had had intermittent pain in that locality for about ten years which had become more noticeable in the past two years. There was no hematuria· chills, fever, pyuria nor weight loss. The past personal and family histories were negative.

Physical examination was essentially negative except for a blood pressure of 170/110. There was moderate tenderness on deep palpation over the left renal region.

An intravenous urogram (figure 1) using 10% diodrast revealed hydronephrosis and hydroureter on the left side. The lower two-thirds of the ureter was not visualized. The right kidney and ureter were normal. Cystoscopy and pyelography were performed. The bladder appeared normal and a number 5 Fr. ureteral catheter was passed to the right renal pelvis with ease; however, it was obstructed at 20 cm. in the left ureter. X-ray studies (figure 2) after retrograde injection of skiodan, showed a filling defect at the junction of the upper and middle thirds of the left ureter.

The laboratory studies were as fololws: The urine was acid and contained a faint trace of

Fig. 1

Fig. 2

*From the Departments of Urology and Pathology of the St. Mary's Hospitol, Clorksburg, W. Va.

Fig. 3

albumin. Specific gravity was 1.020. Microscopically the urine showed an occasional epithelial cell and many amorphous urate crystals. The red blood count was 5,090,000, the white count was 9,600 and the hemoglobin was 14.5 Gm. The blood urea nitrogen was 23 mg. per hundred cc's., the blood sugar was 90 mg. per hundred cc's. and the blood serology was negative.

Preoperative diagnosis was tumor of the ureter, or a possible nonopaque calculus. At operation a left lumbar incision was made and the kidney exposed. The kidney was mobilized and the ureter was found 5 cm. from the ureteropelvic junction. Numerous dilated veins covered the ureteral wall. The ureter was clamped below the tumor and removed together with the kidney.

The patients postoperative course was uneventful and he was discharged on the twelfth hospital day. The blood pressure on discharge was 140/80.

The pathologic specimen consisted of a large kidney (figure 3) measuring 15 x 7 x 4 cm. The pelvis was dilated and the pelvic mucosa hemorrhagic. Five centimeters from the ureteropelvic junction a papillary tumor was noted measuring 2.5 x 0.5 cm. in diameter. The urinary tract proximal to this growth was dilated. The calices were dilated but no renal destruction noted. Microscopically (figure 4) the tumor was composed of fascicular lines of loose, edematous, fibrous tissue. The cells were thin and spindle shaped. There was a large amount of collagenous tissue present but only a small number of cells. Throughout the tumor numerous capillaries and generalized but mild lymphocytic infiltration were observed. The entire tumor was covered by a thin layer of transitional epithelium. A diagnosis of papillary fibroma of the ureter was made.

In summary, a case of primary benign tumor of the fibroma variety is added to the 32 cases reported to date.

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AVOIDING STRESS IN ALCOHOLISM

At present, psychotherapy of chronic alcoholism focuses more on an understanding of the individual personality than of unconscious motivations. The goal is to determine the factors which produce stress, and how they can be recognized so that the patient may avoid, or minimize, stress.

In patients whose alcoholism is a part of a well-defined psychoneurosis or of psychoneurotic personality changes, intensive analysis of the dynamic factors and life development is nedded. Accordingly, good results may be obtained by prolonged psychonalysis or by other types of analysis.—Oskar Diethelm, M. D., in Bulletin, N. Y. Acad. Med.

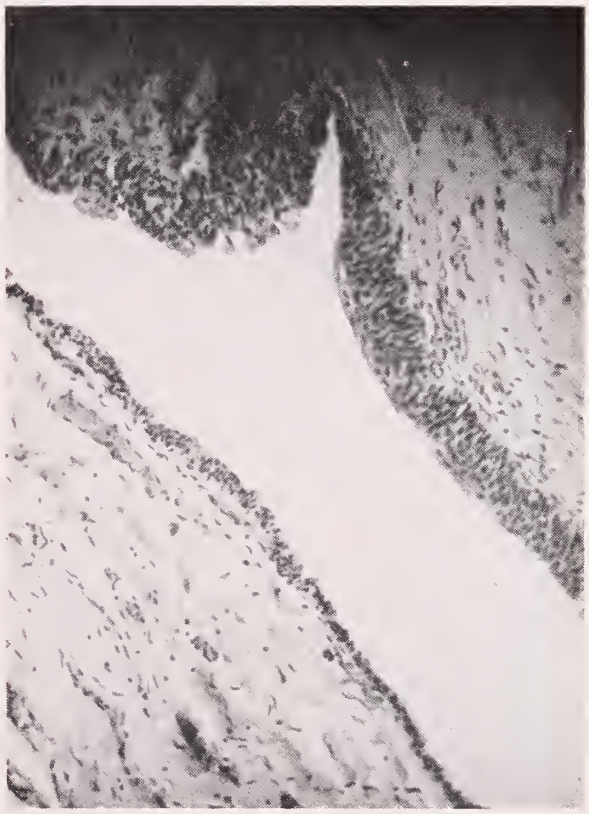

Fig. 4

The President's Page

One of the most acute problems facing the members of the West Virginia State Medical Association concerns the present practices of the United Mine Workers of America Welfare Fund.

Under the regulations in force at this time, the Fund will pay for hospital care and specialty services, including deliveries in hospitals, but will not pay for home or office visits or home obstetrics. This places an unfair burden on the general practitioners who do the bulk of the work and receive no income from the group.

The state UMW Advisory Committee, under the able chairmanship of Dr. Ray Bobbitt, of Huntington, has worked long and hard on this problem. The administrators of the Fund refuse to pay for home and office work until the West Virginia State Medical Association provides some system to assure reasonable care at reasonable fees.

After a lengthy discussion of the subject, the Council, at its spring meeting, instructed the president to add two general practitioners to the state committee, and recommended that each county society appoint a UMW Advisory Committee to handle all controversies between the Fund and the doctors. The Council also instructed the state UMW Advisory Committee to inform the administrators of the Fund that it is believed that we now have a set-up that will work to the advantage of all groups concerned, and to ask them to institute payments for home and office calls and home obstetrics as soon as possible.

We ask your cooperation in our efforts to settle these problems.

Frank G. Salvaggio

President.

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WARFARIN

A new type of rat poison, known as warfarin, is now available commercially and presents hazards of accidental human poisoning, according to Dr. N. H. Dyer, State Director of Health. The action of this poison is quite different from those previously introduced, and it is unique in that it has a specific antidote, namely, vitamin K.

Warfarin is a coined generic term given to a compound that has very active anticoagulant properties. It is 3-(acetonylbenzyl)-4 hydroxycoumarin. This anticoagulant acts similar to the widely used drug, Dicumarol, but it has much greater capacity to produce hypoprothrombinemia. When the product is ingested by rats and mice over a period of four to 10 days, its anticoagulant action destroys them.

In a single large dose, the compound acts on the liver to lower the prothrombin level of the blood. A single dose, even though large, does not cause hemorrhage. When multiple doses of the poison are taken over a period of days in sufficient amounts to lower the prothrombin level below the critical point, hemorrhage sets in. This hemorrhage occurs in the minute capillaries throughout the body. The rodents are killed after four to 10 days of ingesting warfarin due to general internal hemorrhage in many organs. Under similar conditions, it can cause hemorrhage in almost any member of the mammalian group.

Accidental ingestion of meal or other bait containing warfarin over a period of several days by humans would produce hemorrhage as evidenced by petechiae, gingival bleeding, frank hemorrhage in the urine, or general hemorrhage.

A human known to have taken warfarin bait once should be kept under observation for 24 hours and fed milk. When the poison has been taken several times in the course of two or more days, intravenous vitamin K in large doses should be given. Menadione, vitamin K_1, natural vitamin K and the water soluble forms of menadione all are suitable as antidotes. There are available 64 milligram ampules of vitamin K (water soluble) that are being used successfully in cases of overdosage of Dicumarol. If natural vitamin K is available, this may be given orally at the same time in doses up to 100 milligrams. A second ampule may be given several hours later. The hemorrhagic condition, in all probability, will be brought under control with this treatment.

If the patient has taken considerable amounts of warfarin bait over a period of days and then shows frank hemorrhage, immediate fresh whole blood transfusion is indicated, along with the administration of massive doses of vitamin K. The usual transfusion technique and precautions should be followed.

Unlike other rodenticides, there is no permanent damage from the ingestion of sublethal doses of warfarin, for it leaves little or no residue in the body.

Extensive industrial experience, to date, indicates that there is no occupational hazard from inhalation, skin absorption, corneal absorption, or any industrial allergic manifestations.

NEW LAMPS FOR OLD

The Eye-Bank for Sight Restoration, of New York, with which the Boston Eye-Bank is affiliated, has recently issued its fifth annual report.

When the bank was established, so few years ago, no more than twelve or fifteen surgeons in the country were performing corneal-graft operations. At the present time more than a hundred surgeons are operating regularly, and many thousand persons, now blind, are potential candidates for their skill and for the eyes that are coming in increasing numbers to the bank and its affiliated stations. Already over 2000 eyes that were bequeathed by their living owners have been delivered, with 155 hospitals stimulating donor in-

terest and cooperating in the prompt dispatching of eyes to their destinations.

In the matter of transportation, also, teamwork has been developed to a high degree, for only forty-eight hours may elapse between the death of the donor and the grafting of the corneal tissue in the eye of the recipient. In this race against time the airlines of the country and the motor transport corps of the Red Cross have cooperated with split-second precision—"Neither snow, nor rain, nor heat, nor darkness, are permitted to obstruct their speed" when on this errand.—New England Journal of Medicine.

LEST WE FORGET

"Peace—It's our duty to preserve it" is the dedication on the poster created by Ernie Langnehs, of Louisville, Kentucky, for the annual Buddy Poppy appeal of the Veterans of Foreign Wars, conducted nationally during the week of Memorial Day to raise funds for rehabilitation and welfare work.

The artist's own story is an example of what one American youth was willing to sacrifice for the cause of freedom and the ideals for which our nation stands. Rejected by both the Army and the Air Force because of an old football injury, he joined the Army Signal Corps School in 1942 and served in the enlisted Reserve Corps for six months when he was again rejected for active duty and discharged. His next move was a defense plant, where he remained until 1944.

In the meantime, the heroic career of his brother, Bonnie, had influenced his every action. Lieutenant Bonnie Langnehs went into Normandy on D Day with the 325th Glider Infantry, 82nd Airborne Division. On June 9th he was killed. Ernie was more than ever determined to get into the struggle for peace. He joined a volunteer ambulance corps and sailed for Italy. After some months of service he had to be hospitalized and was returned to the United States. He was discharged from Wakeman General Hospital, Camp Atterbury, Indiana, in December, 1944.

Ernie Langnehs had financed his adventure in heroism. He left the hospital carrying his own luggage, limping, and without a cent in his pocket. His brother's death had been—and would always be—the great sorrow of his life. From that sorrow came the inspiration for his poster—"Lest We Forget."

The secret of success of every man who has ever been successful lies in the fact that he formed the habit of doing those things that failures don't like to do.—A. J. King.

GENERAL NEWS

COUNCIL CLEARS HEAVY CALENDAR AT SPRING MEETING IN CHARLESTON

The regular spring meeting of the Council was held at the Daniel Boone Hotel, in Charleston, April 22, 1951, with the chairman, Dr. Charles E. Watkins,, of Oak Hill, presiding.

Honorary Members Elected

The following doctors were elected to honorary lifetime membership: David H. Hill, Madison; Holmes Fielding Troutman, Logan; Clyde Alexander Harper, Clendenin; John Lawrence Dunlap, Nitro; Robert Renwick Vaughan, McConnell; Henry Lawrence Criss and Ford Barker Rogers, Fairmont; Joseph R. Caldwell and Albert Earnest Nolte, Wheeling; and Claude Miller Keever, Belpre, Ohio.

AMA Associote Fellowship

Dr. Joseph A. Striebich, of Moundsville, and Dr. Thomas C. Smith, formerly of Logan, but now of St. Petersburg, Florida, were nominated for Associate Fellowship in the American Medical Association.

VA Fee Schedule

A special committee, composed of Dr. E. Lyle Gage, chairman, and Drs. E. H. Hunter and D. C. Ashton, reported that the matter of a revision of the present VA fee schedule for home town care of patients had been given careful consideration and that the committee was unanimously of the opinion that there should be a revision of the fee schedule, and that it should be upward in many items.

The report was accepted and the council directed the VA Advisory Board to make a further study and then seek such revision as may be deemed proper. The Council also accepted the recommendation of the special committee that the VA Advisory Board be authorized to call upon a member from each of the specialty groups for advice in making the revision.

It was further ordered that the Veterans Administration be requested to postpone action on the renewal of the present contract, pending study and possible revision of the fee schedule.

Dr. Ralph J. Jones, of Charleston, is chairman of the board, and the other members are Dr. Henry M. Escue, of Charleston, and Dr. James R. Brown, of Huntington.

Contribution to AMA Medicol Education Fund

The Council directed that the sum of $500.00 be contributed to the American Medical Association Education Foundation. The fund was established with an initial contribution of $500,000.00 from the AMA Board of Trustees.

UMW Welfore Fund Program

Dr. Ray M. Bobbitt, of Huntington, chairman of the UMW Advisory Committee, submitted a detailed report concerning the UMW Welfare and Retirement Fund program in this state, and the matters covered

in the report were discussed by several members of the Council.

It was ordered that the president appoint two general practitioners to membership on the committee, and that each component society be requested to set up a local UMW advisory committee to consider all complaints with reference to service and fees in connection with the UMW Fund work.

The committee was also directed to notify Fund officials of the appointment of these local committees and to ask that the action of such committees be recognized by the UMW Fund. The committee was also directed to make an earnest effort to have restored in the immediate future home and office medical care and home obstetrics to eligible members of the UMWA.

Dr. Frank J. Holroyd, the president, appointed as general practitioner members of the committee Dr. Charles E. Watkins, of Oak Hill, and Dr. J. C. Lawson, of Williamson.

Practice of Medicine by Osteopathic Physicians

It was ordered that the State Board of Health and the Medical Licensing Board be requested to seek, through the State Department of Health and other proper official channels, an opinion from the Attorney General concerning the legality of the practice in this state by osteopathic physicians of the same type of medicine and surgery now practiced by doctors of medicine.

It was further ordered that the attorney for the West Virginia State Medical Association be requested to submit an opinion with reference to the advisability of the institution of a suit in our courts to test the right of osteopathic physicians to practice medicine and surgery in this state.

The attorney for the State Medical Association is to be requested to submit his opinion for consideration by the Council at the next meeting in July, and the State Board of Health and the Medical Licensing Board are to be requested to make every possible effort to obtain an opinion from the Attorney General by that time.

Blue Shield Plan Report

Dr. James S. Klumpp, of Huntington, chairman of the special committee on hospital and medical service plans, submitted a progress report in the matter of the affirmation by the circuit court of Kanawha County of the right of the insurance commissioner to require certain revisions in the fee schedule of a Blue Shield plan. Dr. D. A. MacGregor, of Wheeling, also spoke on the subject, and a further report is to be submitted at the pre-convention meeting of the Council July 18 at White Sulphur Springs.

Autopsy Procedure Code Ready

Dr. Russel Kessel, of Charleston, Council member of the committee on Code of Autopsy Procedure, reported that the provisions of the Code had been agreed to by all participating groups, that it had been printed, and that distribution had been made by mail to all the members of the West Virginia State Medical Association, hospitals, funeral directors, and other interested groups.

On motion of Doctor Kessel, the committee was discharged from further consideration of this particular matter, and the president was directed to name a member of the Council to serve on a committee composed of members from the praticipating groups to consider and act upon any problems that may present themselves in connection with the new Code of Autopsy Procedure.

The president, Dr. Frank J. Holroyd, appointed Dr. Russel Kessel as the Council member of the committee.

Revision of Coroner's Statute

Doctor Kessel stated that the group of which he was a participating member feels that there should be a complete revision of our laws relating to coroners, with particular reference to the medical examiner's system.

On his motion, it was ordered that the legislative committee give the matter attention, and that Dr. M. L. Hobbs, of Morgantown, pathologist at West Virginia University School of Medicine, be requested to assist the committee in its study of the subject.

The committee was directed to report at the July meeting of the Council, if possible, information concerning the advisability of seeking a change in our present law at the 1953 session of the legislature.

Permanent Home Committee To Report

It was further ordered that the Committee on Permanent Home be requested to make a study of the advisability of taking some concrete action with reference to the establishment of permanent quarters. The committee was requested to report back with recommendations at the next meeting of the Council in July.

Resolution of Report

The following resolution, offered by Dr. James S. Klumpp, of Huntington, was unanimously adopted:

> Whereas, Divine Providence has removed from our fellowship the presence of a revered and loved physician; and,
>
> Whereas, every member of the medical profession in the State of West Virginia has benefited in many ways from the interest and encouragement of medical advances provided by the late Dr. James R. Bloss:
>
> Therefore, Be It Resolved: That the Council of the West Virginia State Medical Association expresses to the bereaved members of the family of Doctor Bloss, their most sincere condolences in the great loss suffered by the medical profession in West Virginia.
>
> Resolved, Further, That a copy of these resolution be forwarded to the members of Doctor Bloss' family and also published in the Journal of the State Medical Association.

The meeting was attended by Dr. Charles E. Watkins, of Oak Hill, chairman; Dr. Frank J. Holroyd, of Princeton, president; Dr. A. R. Sidell, of Williamstown, first vice president; Dr. T. M. Barber, of Charleston, treasurer; and the following members of the Council: Drs. Thomas G. Reed, Charleston; Fred R. Whittlesey, Morgantown; Hu C. Myers, Philippi; E. H. Hunter, Webster Springs; George F. Evans, Clarksburg; James S. Klumpp, Huntington; Athey R. Lutz, Parkersburg; J. C. Lawson, Williamson; E. Lyle Gage, Bluefield; D. C.

Ashton, Beckley; Russel Kessel, Charleston; and Mr. Charles Lively, secretary ex officio.

The meeting was also attended by Dr. R. C. Hatfield, of Oceana; Dr. D. A. MacGregor, of Wheeling; Dr. Ray M. Bobbitt, of Huntington; and Dr. W. Fred Richmond, of Beckley.

The Council adjourned to meet at the Greenbrier, in White Sulphur Springs, July 18, 1951.

DOCTORS IN THE SERVICE

According to the records in the headquarters offices of the West Virginia State Medical Association, sixteen members are now serving in the Armed Forces. The list of members now in active service, compiled as of April 20, is as follows:

Robert W. Hibbard, Huntington
W. R. Van Den Bosch, Huntington
R. J. Van de Wetering, Huntington
Walter K. Yates, Huntington
J. L. Leef, Richwood
Donald K. McIntyre, Berkeley Springs
M. H. Porterfield, Martinsburg
P. E. Gordon, Clarksburg
William N. Walker, Jr., Bridgeport
William J. Bannen, Jr., Dunbar
Harry Ison, Red Jacket
Joseph J. Claro, Clendenin
C. Carl Tully, South Charleston
John R. Ashcraft, Holden
Brady F. Randolph, Jr., Morgantown
Lee Burley, Sistersville
Harry F. Coffman, Keyser

The following doctors who have been in active service have been released to inactive duty and have returned home: James R. Brown and Bruce H. Pollock, both of Huntington, and John R. Godbey, of Charleston.

A few additional members will report for active duty between May 1 and July 1.

WOMAN'S AUXILIARY TO MEET JULY 19-21

The 27th annual meeting of the Woman's Auxiliary to the West Virginia State Medical Association will be held conjointly with the annual meeting of the West Virginia State Medical Association at the Greenbrier, in White Sulphur Springs, July 19-21, 1951, with the president, Mrs. Ross F. Daniel, of Beckley, presiding. The full program for the meeting will appear in the July issue of the Journal.

During the meeting, Mrs. John F. McCuskey, of Clarksburg, will be installed as president, and it is thought that the installation will be made by the president of the Woman's Auxiliary to the American Medical Association.

WEIRTON FLUORIDATING WATER SUPPLIES

The city of Weirton has added fluoridation to its public water supply, and, according to Dr. N. H. Dyer, state director of health, applications have been filed with the department by municipal officers of Logan, Ripley and Wellsburg for permits to add fluorine to their city water supplies.

The topical fluorine unit of the division of sanitary engineering provided demonstrations in Grant and Logan counties during April.

DIABETIC LAY SOCIETY IN KANAWHA

The first meeting of the new Kanawha Diabetic Lay Society was held at the YWCA in Charleston the middle of March. The purpose of the meeting was twofold: First, to organize a local diabetes lay society; and, second, to discuss diabetes and to disseminate information concerning the treatment of the disease.

More than 130 laymen were present at the meeting, notice of which had been carried on the radio and in news articles in the local papers.

Following a short talk on one phase of diabetes by a member of the committee on diabetes, there was a half-hour roundtable discussion during which questions propouned by members of the audience were answered by physicians on a panel.

Several members of the audience volunteered their services to help develop the society in the Kanawha area, and it was practically unanimously agreed that similar meetings should be held monthly.

Representatives of Eli Lilly & Company and E. R. Squibb & Sons were present and exhibited products and distributed booklets for the diabetic.

It was announced at the meeting that similar lay societies are being formed throughout the state which will ultimately amalgamate with the West Virginia Diabetes Association.

STATE DOCTORS ATTEND ACP MEETING

Dr. T. Grier Miller, of Philadelphia, was named president elect of the American College of Physicians at the 32nd annual session held in St. Louis, April 9-13. He will succeed Dr. Maurice C. Pincoffs, of Baltimore, who will serve during the ensuing year.

Dr. Walter B. Martin, of Norfolk, Virginia, was elected vice president, and Drs. J. Owley Manier, of Nashville, Tennessee, and Wallace M. Yater, of Washington, D. C., were elected regents for terms expiring in 1954.

The following West Virginia doctors were registered at the meeting:

Ralph J. Jones, Ralph H. Nesterman, Paul H. Revercomb, and Pat A. Tuckwiller, of Charleston; George F. Evans and Lynwood D. Zinn, of Clarksburg; L. Rush Lambert, of Fairmont; Walter E. Vest and J. Russell Cook, of Hunting; Don V. Hatton, of Oak Hill; Dante Castrodale and Charles Chapman, of Welch; Robert U. Drinkard, Jr., Robert M. Sonneborn, and Charles H. Hiles, of Wheeling; and James P. Baker of White Sulphur Springs.

CODE OF AUTOPSY PROCEDURE

A copy of the new standard Code of Autopsy Procedure has been mailed to each member of the West Virginia State Medical Association, and distribution is being made by the Hospital Association of West Virginia to all of the hospitals in the state. In addition, the West Virginia Funeral Directors Association is furnishing all of the members of its group with at least one copy of the pamphlet.

The code has the official approval of all participating groups, including the Association of Pathologists of West Virginia.

RELOCATIONS

Dr. Eugene J. Nicgorski, of Elbert, has moved to Salem, Massachusetts, where he will continue in practice. His address there is R22, Liberty Street.

* * * *

Dr. E. Q. Hull, of Charleston, has accepted an assignment with the Atomic Energy Commission at North Augusta, South Carolina, and has moved to his new location there. His address in that city is 13A Washington Homes.

* * * *

Dr. Altamont A. Bracey, formerly of Welch, is now located at South Hill, Virginia, where he is engaged in the practice of his specialty of traumatic surgery.

* * * *

Dr. Constantine Veremakis, of Wheeling, has moved to Stamford, Connecticut, where he will continue the practice of his specialty of anesthesiology. His address there is 65 South Street.

GRADUATE STUDENTS STUDY PH IN STATE

A group of nine graduate students working toward their master's degree in public health at the University of Michigan School of Public Health visited Charleston during the week of April 9 for the purpose of exchanging ideas on public health administration with individual directors of bureaus and divisions of the state department of health. The group was headed by Dr. Carl Buck, professor of public health administration at the University of Michigan.

According to Dr. N. H. Dyer, state director of health, the object of the visit was to afford the members of the group an opportunity to observe at first hand public health practices in this state. They, in turn, offered the personnel of the state department of health the opportunity to confer with out-of-state public health workers who have had varying backgrounds and experiences in this type of work over the country.

The study was made at the invitation of Doctor Dyer. Similar studies have already been made in Michigan, Ohio and Indiana.

STATE SURGEONS AWARDED FELLOWSHIPS

Dr. Harry Lee Claud, of Washington, D. C., was named president elect of the Southeastern Surgical Congress at the annual meeting held at Hollywood Beach, Florida, April 11-14. He will succeed Dr. Joseph Stewart, of Miami, and will be installed at the annual meeting which will be held next year in Atlanta, Georgia.

Senior fellowships were awarded to the following West Virginia surgeons at the meeting: Drs. Roy R. Summers, Charleston; Thomas B. Baer, John J. Sherman, M. L. White, Jr., and W. R. Wilkinson, Huntington; A. Kyle Bush, Philippi; and C. B. Hughes, Jr., Montgomery.

Dr. Wade H. St. Clair, of Bluefield, was elected an honorary fellow of the Congress.

The sections in West Virginia, Maryland, and the District of Columbia will sponsor a fall meeting at Baltimore, September 11-13, and all interested physicians in the three states are invited to attend.

DISEASES OF KIDNEY THEME FOR GRADUATE EDUCATION COURSE MAY 16

The second of a series of three one-day meetings devoted to graduate education will be held at the Daniel Boone Hotel, in Charleston, May 16, 1951. This meeting, which is being sponsored by the West Virginia University School of Medicine and the State Medical Association's Committee on Medical Education, will be in the nature of a symposium on diseases of the kidney. The preclinical part of the program will be presented by members of the faculty of West Virginia University School of Medicine, while the clinical part will be presented by out-of-state speakers.

The program will get under way at nine o'clock with Dr. I. E. Buff, of Charleston, a member of the committee, in the chair. All of the other members of the committee on medical education will be present. Dr. M. L. Hobbs, of Morgantown, pathologist at West Virginia University School of Medicine, is chairman, and, besides Doctor Buff, the other members are Drs. Otis G. King, of Bluefield, Hu C. Myers, of Philippi, and J. P. Baker, of White Sulphur Springs.

The following program will be presented first by members of the faculty of the School of Medicine:

"Anatomy and Histology of the Kidney."—T. Wally Williams, M. D.

"Chemistry of the Kidney."—M. O. Coover, M. D.

"The Physiology of the Kidney."—David Northrup, M. D.

The clinical part of the program will be presented immediately following the final paper on preclinical subjects. This program is as follows:

"The Relation of the Kidney to Hypertension."—J. Murray Kinsman, M. D., Dean of the University of Louisville School of Medicine.

"Diagnosis of Acute Renal Insufficiency," and "Modern Diagnosis and Treatment of Chronic Nephritis."—I. Snapper, M. D., Professor of Medicine, Columbia University College of Physicians and Surgeons.

"Newer Concepts of Electrolyte Balance."—Thaddeus S. Danowski, M. D., Professor of Research Medicine, University of Pittsburgh School of Medicine.

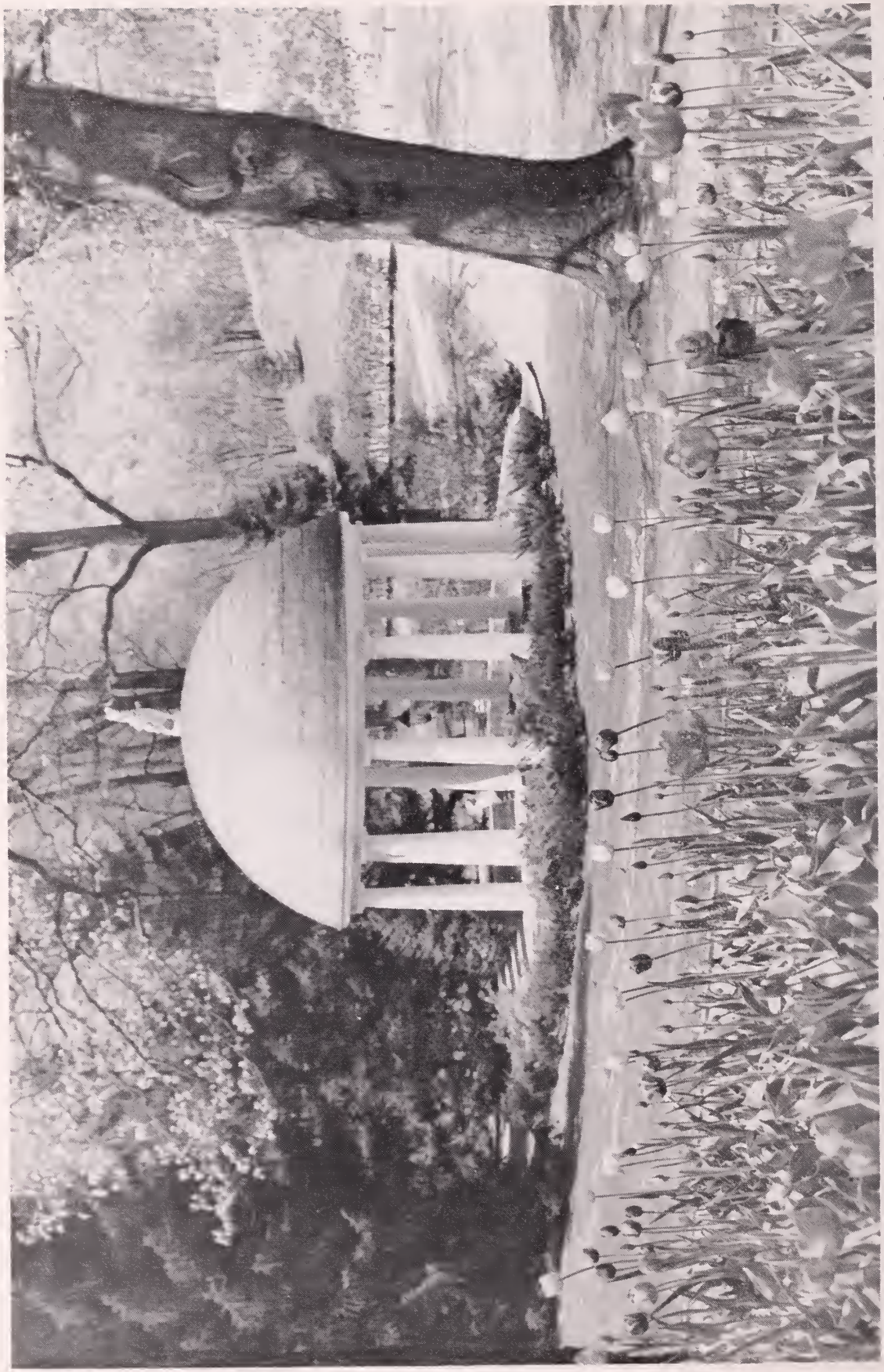
"Significance of Albuninuria," and "Newest Methods of Diagnosis and Treatment of Uremia."—George E. Wakerlin, M. D., Professor of Physiology and Head of the Department, University of Illinois College of Medicine.

A short intermission will be arranged for during the noon hour, and the meeting is scheduled to adjourn not later than five o'clock.

The newest methods of diagnosis and treatment of various diseases of the kidney will be presented, and the subjects discussed will be of interest to the specialist as well as the general practitioner.

DR. J. F. McCUSKEY ELECTED TO CITY OFFICE

Dr. John F. McCuskey, of Clarksburg, co-chairman of the State Medical Association's public relations committee, was elected a member of the city park commission at the municipal election held in Clarksburg April 17. Doctor McCuskey is a former president of the Harrison County Medical Society.



Cummins, White Sulphur Springs

One of the landmarks at the Greenbrier is the Spring House, complete in virtually every detail as built in 1935 by L. Henderson, of New Orleans, for James Calwell, who owned and managed the property at that time.

AMA PRESIDENT TO HEAD LIST OF GUEST SPEAKERS AT CONVENTION

The scientific program for the 84th annual meeting of the West Virginia State Medical Association at White Sulphur Springs, July 19-21, 1951, has just about been completed. The full program will be released early in May by the program committee, which is composed of Dr. L. J. Pace, of Princeton, chairman, Dr. Cecil O. Post, of Clarksburg, and Dr. James L. Wade, of Parkersburg.

It is now known that the list of eminent guest speakers will be headed by Dr. John W. Cline, of San Francisco, associate clinical professor of surgery at Stanford University School of Medicine, who will be elevated to the presidency of the American Medical Association at the annual meeting in Atlantic City in June. Doctor Cline, who will succeed Dr. Elmer L. Henderson, of Louisville, Kentucky, will be the guest speaker at an open meeting to be held at the Greenbrier, Friday evening, July 20.

There will be three general sessions, one each on July 19, 20, and 21. Each session will begin at nine o'clock in the morning and end shortly after noon. All section and society meetings will be held afternoons during the convention.

Dr. Frank J. Holroyd, of Princeton, will deliver his presidential address at an open meeting on Thursday evening, July 19, and Mrs. Ross P. Daniel, of Beckley, president of the Woman's Auxiliary to the West Virginia State Medical Association, will also appear as a guest speaker.

Guest Speakers July 19-20

Invitations to appear on the program Thursday and Friday, July 19 and 20, have already been accepted by Dr. Arnold S. Jackson, Madison, Wisconsin, surgeon; Dr. George E. Burch, New Orleans, professor of medicine at Tulane University; Dr. Ralph M. Tovell, Hartford, Connecticut, anesthesiologist; Dr. Alexis F. Hartmann, St. Louis, head of the department of pediatrics at Washington University School of Medicine; Dr. A. R. Colwell, Chicago, associate professor of medicine at Northwestern University Medical School; and Dr. Oscar Swineford, Jr., Charlottesville, professor of the practice of medicine at the University of Virginia School of Medicine.

Program for July 21

The following guest speakrs will appear on the program at the final session on Saturday, July 21:

Dr. John A. C. Colston, Baltimore, associate professor of urology at Johns Hopkins Hospital; Dr. H. R. McCarroll, St. Louis, assistant professor of orthopedic surgery at Washington University School of Medicine; Dr. Emil Novak, Baltimore, associate professor of obstetrics at the University of Maryland School of Medicine and assistant professor of gynecology at Johns Hopkins School of Medicine; and Dr. Frank E. Adair, New York City, associate professor of clinical surgery at Cornell University Medical College.

House of Delegates

The first meeting of the House of Delegates will be held Thursday afternoon, July 19, and the second and final meeting on Friday afternoon. The annual banquet is scheduled for Saturday evening. Dress is optional.

For the third consecutive year, there will be no scientific or technical exhibits as there are no facilities for such exhibits at the Greenbrier.

Reservations at the Greenbrier

Reservations at the Greenbrier for the meeting have already been made for between 350 and 400 persons. Accommodations for 650 persons will be provided for the meeting, so choice rooms are still available. The following accommodations are being held for members of the State Medical Association and guests:

16 single rooms with private bath at $19.00 per day each.

15 suites, consisting of two single rooms with connecting bath, at $18.00 per room.

10 suites, consisting of a double room and a single room with connecting bath, $52.00 each combination.

262 rooms with twin beds and bath, two persons to a room, at $17.00 each person.

All meals are included at the rates quoted by the Greenbrier.

Applications for rooms should be mailed directly to the Reservation Manager, The Greenbrier, White Sulphur Springs, and it is necessary that the date of arrival and departure be specified. It is advisable to give the approximate hour of arrival.

No applications for reservations should be sent to the State Medical Association, as all such applications must be cleared through the Greenbrier.

NO REGISTRATION FEE

There will be no registration fee in connection with the 84th annual meeting of the West Virginia State Medical Association, July 19-21, 1951, at The Greenbrier, in White Sulphur Springs. Part of the special assessment levied against each member by the House of Delegates at the annual meeting last July will be used to defray the expenses of the meeting.

Confirmation of reservations will be made by letter from the management and copies of all letters of confirmation will be furnished to the State Medical Association so that an accurate estimate may be had at all times concerning the number of reservations that have been made.

Golf and Tennis Tournaments

The usual golf and tennis tournaments will be held during the convention. Full information concerning the tournaments will appear in the June issue of the Journal.

Dr. James S. Klumpp, of Huntington, has been named chairman of the golf committee, and the other members are Drs. R. R. Summers, of Charleston, and J. I. Markell, of Princeton.

Dr. Robert M. Biddle, of Parkersburg, heads the tennis committee. Drs. John E. Lutz and Spencer L. Bivens, of Charleston, continue as members of the committee.

These appointments were made late in April by Dr. Frank J. Holroyd, president of the State Medical Association.

PRE-CONVENTION MEETING OF COUNCIL

The pre-convention meeting of the Council is scheduled for Wednesday afternoon, July 18, at the Greenbrier. The meeting will be called to order at four o'clock by the chairman, Dr. Charles E. Watkins, of Oak Hill.

MLB TO MEET JULY 9-11

The summer meeting of the Medical Licensing Board will be held in Charleston, July 9-11, 1951, for the purpose of examining applicants for license to practice medicine in West Virginia.

ACADEMY MEETING AT HUNTINGTON

A meeting devoted to the subject of cancer, sponsored by the West Virginia Academy of General Practice will be held at Huntington May 20. Two speakers, who will appear under the auspices of the West Virginia Cancer Society will discuss the modern treatment of the disease.

The Huntington meeting will be the third of a series of meetings being sponsored by the Academy during 1951. Meetings have already been held at Buckhannon and Parkersburg, and similar meetings will be held later in the year at Martinsburg, Fairmont, Logan, and Beckley.

Full information concerning the program for the Huntington meeting may be obtained from Dr. Carl B. Hall, of Charleston, secretary of the Academy.

1951 HONOR ROLL

The following component societies have reported a 100 per cent payment of state dues and special assessment by their members, thus "making" the 1951 honor roll:

Boone
Brooke
Doddridge
Hancock
Harrison
Marshall
Mason
Parkersburg Academy
Preston
Raleigh
Summers
Wetzel

Two societies report that dues have been paid by all but one member, and seven societies each report payment by all but two members.

A total of 34 new members have been elected by component societies since the first of January. A list of the new members elected from January through the middle of June will appear in the July issue of the Journal.

NEW MEDICAL DIRECTOR AT WEIRTON STEEL

Dr. J. L. Thompson, of Weirton, has been named chief surgeon and director of the medical department of the Weirton Steel Company at Weirton. He succeeds Dr. L. A. Whitaker, who has retired after 23 years of continuous service with the company. Dr. Whitaker will continue as a consultant to the medical department.

Dr. Thompson, who assumed his new duties on April 14, has been serving as Doctor Whitaker's assistant for the past 16 years.

NATIONAL FOUNDATION FILMS AVAILABLE

The National Foundation for Infantile Paralysis has available for use by professional and lay groups two films which will be furnished without charge upon request.

One is titled, "A New Horizon." Sound, 20 minutes, 16 mm. This is a technical film on physical therapy. The other, "On Our Own," is also sound film, 14 minutes, 16 mm. This film, which concerns the physical phase of rehabilitation from the patient's standpoint, is more particularly suited for students of orthopedic nursing, physicians, therapists, nurses, attendants and patients.

Requests for the use of the films should be addressed to Mr. Sterling Evans, West Virginia State Representative of the National Foundation, 307 Security Building, Charleston 1, West Virginia. Requests should be mailed several days in advance of the date of the meeting, as the films will have to be sent from the national headquarters in New York City.

ANESTHESIOLOGISTS TO MEET

The spring meeting of the West Virginia Society of Anesthesiologists will be held at the Stonewall Jackson Hotel, in Clarksburg, Sunday, May 6, 1951.

Dr. Donald Stubbs, of Washington, D. C., a member of the Potomac Society of Anesthesiologists, will present a paper on the subject of "Anesthesia for Part-time Anesthetists."

A business meeting of the Society will be held Sunday morning at eleven o'clock, and will be followed by the luncheon and scientific program at one o'clock.

Guests will include members of the Harrison County Medical Society, and a general invitation has been extended to physicians over the state to attend the meeting.

Dr. Newman H. Newhouse, of Charleston, is president of the West Virginia Society of Anesthesiologists and Dr. S. Elizabeth McFetridge, of Shepherdstown, is secretary.

DR. H. S. TAIT HEADS WESTON HOSPITAL

Dr. H. Sinclair Tait, a member of the medical staff of the Weston State Hospital, has been appointed acting superintendent to succeed Dr. Charles A. Zeller, who resigned a few weeks ago to accept appointment as head of the psychiatric department of the new veterans hospital at Clarksburg.

Doctor Tait, a native of St. Johns, Newfoundland, has been a member of the staff at Weston since 1948, serving as clinical director. He has also been in charge of out-patient treatment.

GOVERNOR PONDERS MEDICAL SCHOOL SITE

Governor Okey L. Patteson has set aside the week of April 30 for conferences with groups interested in the matter of the site for the new four-year school of medicine, dentistry and nursing. He has asked that interested individuals submit their views in writing.

Under the provisions of the bill establishing the school, the Governor is to designate the location on or before July 1, 1951.

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"*Bronchodilators (Antispasmodics).* Aminophyllin is the most effective drug in this [xanthine] series. . . . Rectally, in suppositories or solution, it is more effective than by oral administration and is useful when employed two or three times daily in the prolonged [asthmatic] attack. . . ."

Feinberg, S. M.: Asthma—Present Status of Therapy, Chicago M. Soc. Bull. 51:1062 (June 18) 1949.

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7½ grains

For Rectal Administration

—nonirritating to rectal mucosa—prompt disintegration —easily inserted and retained.

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COMMITTEE TO PROPOSE REVISION OF CONSTITUTION AND BY-LAWS

The Committee on Revision of Constitution and By-Laws, charged with the responsibility of an overall revision of the existing constitution and by-laws for the purpose of ironing out conflicts in the various articles and chapters and deleting unnecessary and obsolete sections, has finished its work and prepared its report, which will be submitted to the House of Delegates at the annual meeting at White Sulphur Springs, July 19-21, 1951.

At a meeting of the committee held in Charleston April 1 it was ordered that the proposed amendments be printed in the May, 1951, issue of the West Virginia Medical Journal so that all of the members may have an opportunity to consider them in advance of the annual meeting. The revisions will be submitted to the Council for formal consideration at its pre-convention meeting at the Greenbrier, July 19.

The amendments will be offered at the first meeting of the House of Delgats on July 19 by Dr. Sobisca S. Hall, of Clarksburg, chairman of the committee. The other members are Drs. Walter E. Vest, of Huntington, J. N. Jarrett, of Oak Hill, R. Alan Fawcett, of Wheeling, and Donald R. Roberts, of Elkins. Doctor Roberts was named a member to succeed Dr. Harry F. Coffman, of Keyser, who is now in active service with the armed forces.

The proposed amendments to the constitution will lie over for one year and will be submitted to a vote at the annual meeting in 1952. However, the amendments to the by-laws, if adopted, will all become effective immediately except in those cases where they might be in conflict with proposed revisions of the present constitution, when they would not become effective unless and until such amendments are adopted.

Two amendments to the constitution, will be voted upon at the annual meeting in July. One would raise the annual dues to $25.00, and the other would limit membership in the State Medical Association to doctors of medicine who are licensed to practice in this state and who are members of a component medical society.

The amendments which will be offered at the first meeting of the House of Delegates on July 19 are as follows:

CONSTITUTION

Art. II, Sec. 1, line 6. Insert after the word "science;" the words "to promote the public health;"

Art. II, Sec. 1, lines 8-11. Delete the words "to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition;", and insert in lieu thereof the words "to promote the general welfare of physicians;"

Art. II, Sec. 1, line 16. Delete the words "prolonging and adding comfort to life.", and insert in lieu thereof "prolonging life and adding comfort thereto."

Art. V, Sec. 1, line 4. Delete the words "and (3) *ex-officio*, the President.", and insert in lieu thereof the words "and (3) the President, the two Vice Presidents, and the Treasurer."

Art. VI, Sec. 1, line 5. Delete the words "Five Councillors shall constitute a quorum", and insert in lieu thereof the words, "A majority of the membership of the Council shall constitute a quorum."

Art. VII, Sec. 1, line 6. Delete the word "county" so that the clause will read "such societies to be composed exclusively of members of component societies."

Art. IX, Sec. 1, line 2. Delete the word "and," after the words "two Vice-Presidents,".

Art. IX, Sec. 5. Delete the entire section. (See Art. V, Sec. 1, with proposed amendment).

Art. IX, Sec. 6. Delete the entire section.

Art. XI, Sec. 1, paragraph 2, lines 7-9. Delete the entire sentence beginning "All resolutions", and insert in lieu thereof the following: "If there be objection to the adoption of any resolution appropriating funds, it must be referred to the Council before action is taken thereon."

Art. XII, Sec. 1. Delete the words "and, if" in line 6, and all of lines 7, 8, 9, and 10, and add in lieu thereof the following: "and if those voting shall comprise a majority of the members of the Association, then the action of the majority of those so voting shall determine the question and be binding upon the House of Delegates."

BY-LAWS

Chap. I, Sec. 1. Amend the section to read as follows: "The name of a physician on the properly certified roster of members of a component society shall be *prima facie* evidence of membership in this Association, provided he has paid local and state dues and any current assessment, and provided further that he is licensed to practice medicine in West Virginia."

Chap. I, Sec. 3. Amend the first sentence to read as follows: "Each member in attendance at an annual session shall register and indicate the component society of which he is a member."

Chap. I, Sec. 4, line 3. Correct spelling of word "permitted".

Chap. I, Sec. 5, line 4. Delete the word "county" and insert in lieu thereof the word "component".

Chap. I, Sec. 5, line 4. Delete the words "the request of his county society, and election by Council," and insert in lieu thereof the words, "nomination by his county society and election by the Council,". Delete the words and figures "sixty-five (65)", in line 8, and insert in lieu thereof the words and figures "seventy (70)", and in lines 9 and 10, delete the words and figures "fifteen (15) consecutive years prior to his sixty-fifth birthday," and insert in lieu thereof the words "fifteen (15) consecutive years immediately prior to his seventieth birthday,". Delete the words "upon request of his component society," in line 11, and insert in lieu thereof the words, "upon nomination by his component society,". Place a period after the word "membership" in line 15, and delete the remainder of line 15 and all of line 16.

Chap. II, Sec. 1, lines 4 and 5. Delete the words "or the place selected prove inadequate," and insert in lieu thereof the words "or if the place selected should prove inadequate,".

Chap. III, Sec. 1, line 6. Place a period after the word "President", and delete the words "and the orations."

Chap. IV, Sec. 1, line 3. Delete the words "Scientific Work Committee", and insert in lieu thereof the words "Program Committee".

Chap. IV, Sec. 2, line 5. Place a period after the word "thereof", and delete the words "above ten members."

Chap. IV, Sec. 2. Amend the last sentence in the section to read as follows: "In case any of the regularly elected delegates or alternates be not present at an annual meeting, the members of the component societies to which they belong who may be present shall elect a delegate or delegates *pro tem*."

Chap. IV, Sec. 3, line 1. Delete the words "and Councillors".

Chap. IV, Sec. 4, line 2. Insert the word "the" before the word "Council".

Chap. IV, Sec. 5, lines 2, 3 and 4. Delete the words "in those important matters wherein it is dependent on the profession," and insert in lieu thereof the words "in those matters wherein the public is dependent on the profession,".

Chap. IV, Sec. 6, line 10. Insert the word "ethical" before the word "physician", and in the same line, delete the words "who is reputable".

Chap. IV, Sec. 10, lines 3 and 4. Delete the words "designated by hypenating the names of two or more counties so as to distinguish them", and insert in lieu thereof the words "designated by appropriate names so as to distinguish them".

Chap. V, Sec. 1. Delete the second paragraph which reads as follows: "Constituent societies must be notified 90 days before an annual meeting of the West Virginia State Medical Association of any proposed legislation so that delegates may be properly instructed by their component societies."

Chap. V, Sec. 2, line 3. Delete the words, "Scientific Work Committee.", and insert in lieu thereof the words "Program Committee."

Chap. VI, Sec. 1, line 14. Delete the words, "county societies" and insert in lieu thereof the words, "component societies".

Chap. VI, Sec. 4, line 9. Delete the words, "a bond" and insert in lieu thereof the words "such bond as he may require".

Chap. VI, Sec. 4, second paragraph, lines 4, 5 and 6. Delete the words, "Such funds shall be invested only in bonds of the United States of America", and insert in lieu thereof the words, "Such funds shall be invested only in such securities as may be approved by the Council."

Chap. VII, Sec. 2, line 2. Delete the word "shall" and insert in lieu thereof the word "may".

Chap. VII, Sec. 2, lines 7-10, both inclusive. Delete the entire sentence which reads as follows: "He shall make an annual report of his work and of the condition of the profession in each county in his district at the annual session of the House of Delegates."

Chap. VII, Sec. 4. Delete the entire section, which reads as follows: "In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges for component societies until such counties shall be organized separately."

Chap. VII, Sec. 5, line 6. Delete the word "actively".

Chap. VII, Sec. 8, line 2. Insert before the words "business manager" the words "managing editor and".

Chap. VII, Sec. 8, line 6. Delete the words "Committee on Scientific Work.", and insert in lieu thereof the words "Program Committee."

Chap. VII, Sec. 8, line 18. Delete the words, "and automotive and liability".

Chap. VII, Sec. 8, second paragraph, line 3. Insert after the word "vacancy" the words "by appointment".

Chap. VII, Sec. 9. Delete the entire section and insert in lieu thereof the following: "Sec. 9. The Council shall be empowered to employ a competent attorney for the Association."

Chap. VIII, Sec. 1. Change listing of standing committees to include "Program Committee" instead of "Committee on Scientific Work".

Chap. VIII, Sec. 2, second paragraph, line 1. Delete the words, "Scientific Work Committee" and insert in lieu thereof the words "Program Committee".

Chap. VIII, Sec. 2, paragraph 3. Delete the entire paragraph pertaining to the Committee on Syphilis.

Chap. VIII, Sec. 2, paragraph 4. Change the paragraph to read as follows: "The members of the Committees on Child Welfare and Maternal Welfare shall be elected by the House of Delegates, one from each Congressional District, at each annual meeting. Nominations for membership on these committees are to be made by the delegates present from the various Congressional Districts. Each such committee shall select a chairman from among the members so elected."

Chap. VIII, Sec. 4, Sub-sec. (c), last line. Change the word "disease" to "diseases" and delete the words "and neglect."

Chap. VIII, Sec. 4, Sub-sec. (m), lines 1 and 2. Delete the words "(l) Scientific Work. The Committee on Scientific Work" and insert in lieu thereof the following: "(l) Program. The Program Committee".

Chap. VIII, Sec. 4, Sub-sec. (o), line 3. Delete the words "tuberculosis bodies" and insert in lieu thereof the words "tuberculosis organizations". Place a period after the word "sanatoriums" in line 11, and delete the remainder of line 11 and all of line 12.

Chap. VIII, Sec. 5. Change last sentence in paragraph to read as follows: "The Executive Secretary shall be ex-officio secretary, managing editor, and business manager in charge of advertising."

Chap. VIII, Sec. 5, second paragraph, lines 3 to 8, both inclusive. Delete entire sentence beginning with the words "At the first selection of this committee" and ending "for a five-year term". Also delete the word "thereafter," in line 8, so that the sentence will read as follows: "One member shall be selected annually for a five-year term."

Chap. VIII, Sec. 5, paragraph 3, line 3. Delete the words "on any".

Chap. VIII, Sec. 5, paragraph 3. Change the designation "Secretary-Manager" in lines 4, 5, and 6 to "Secretary-Business Manager".

Chap. VIII, Sec. 5, paragraph 3, last line. Delete the words, "to collect past due accounts.", and insert in lieu thereof the words, "to collect all monies due."

Chap. IX, Sec. 3, line 3. Change "Secretary" to "Executive Secretary".

Chap. IX, Sec. 3, line 9. Delete the words "and its decision shall be final.", and insert in lieu thereof the words, "and the decision of the Council shall be final."

Chap. IX, Sec. 4. Delete entire section after first sentence.

Chap. IX, Sec. 5, lines 4 to 7, both inclusive. Delete all of sentence after the words "Medical Association," line 4, and insert in lieu thereof the following: "every ethical and legally registered physician shall be eligible to apply for membership."

Chap. IX, Sec. 5. Delete last sentence and insert in lieu thereof the following: "Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to file application for membership."

Chap. IX, Sec. 6, lines 4 and 5. Delete the words "and its decision shall be final.", and insert in lieu thereof the words, "and the decision of the Council shall be final."

Chap. IX, Sec. 7. Change the word "or" to "and" before the words "written evidence" in line 2.

Chap. IX, Sec. 8, line 3. Change the word "shall" to "may".

Chap. IX, Sec. 10, line 2. Change the word "county" to "area".

Chap. IX, Sec. 11. Delete the entire section.

Chap. IX, Sec. 12. Delete the entire section.

Chap. IX, Sec. 13, line 1. Insert after the word "secretary", the words "or treasurer".

Chap. X, Sec. 1. Insert new Sec. 1 to read as follows: "Sec. 1. Resolutions offered at the first session of any annual meeting of the House of Delegates shall lie on the table for one day."

Chap. X, Sec. 2, line 2. Delete the words, "the orators".

Chap. X, Sec. 3, line 3. Insert the word "Executive" before the word "Secretary".

Chap. X, Sec. 4, line 3. Place the apostrophe after the "t" instead of after the "s" in the words "Robert's Rules of Order,".

ANNUAL AUDIT

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1950 has been completed by Norman S. Fitzhugh & Company, Certified Public Accountants, of Charleston, and submitted to the Association's treasurer, Dr. T. Maxfield Barber, of Charleston.

The complete audit, with letter of transmittal, follows:

NORMAN S. FITZHUGH & COMPANY
Public Accountants
Kanawha Banking & Trust Building
Charleston 1, W. Va.

Dr. T. M. Barber, Treasurer
West Virginia State Medical Association
Charleston, West Virginia

We have made an examination of the receipts and disbursements of West Virginia Medical Association for the calendar year ended December 31, 1950 and submit herewith summary statements of the various funds for the year under review.

All receipts of record and all disbursements with the exception of a small amount representing office petty cash disbursements were examined and the cash balance of $17,342.77, was reconciled with the statement of the depository bank. Cancelled checks representing all disbursements from the bank account were on hand and examined except for seven outstanding checks amounting to $222.90.

The subsidiary records were test checked to the extent deemed adequate to satisfy ourselves that all receipts of record were properly accounted for.

United States Treasury 2% Bonds registered in the name of the association and having a face value of $22,000.00 were inspected by us at your safe deposit box on March 27, 1951.

A comparative statement of assets and balances in the various funds at December 31, 1949 and 1950 is as follows:

	12-31-49	12-31-50	Increase (Decrease)
General Fund	$ 3,514.85	$ 2,803.55	($ 711.30)
A. M. A. Dues		300.00	300.00
Public Relations Fund	16,823.52	10,492.18	(6,331.34)
Medical Journal Fund	7,730.91	7,995.09	264.18
Convention Fund (Deficit)	(3,071.33)	(4,248.05)	(1,176.72)
Cash in Bank	24,997.95	17,342.77	(7,655.18)
U. S. Treasury 2% Bonds (Face Value $22,000.00) at Cost	22,101.53	22,101.53	
Total Assets	$47,099.48	$39,444.30	($7,655.18)

In our opinion, all receipts of record and all disbursements of the West Virginia State Medical Association for the calendar year 1950 have been properly accounted for and the balance of cash in bank at December 31, 1950 is correctly stated herein.

NORMAN S. FITZHUGH & COMPANY
By Norman S. Fitzhugh, Jr.
Certified Public Accountant.

Charleston, West Virginia
March 27, 1951.

COMBINED STATEMENT OF RECEIPTS AND DISBURSEMENTS

Calendar Year 1950

BALANCE—JANUARY 1, 1950			$24,997.95
RECEIPTS			
Dues—Net		$19,575.00	
Interest on U. S. Bonds		440.00	
Received for Collection of A.M.A. Dues		297.50	
Dues Collected for A.M.A.		30,425.00	
Public Relations Assessments (1949)			
A.M.A.	$ 25.00		
State	25.00	50.00	
Advertising		16,644.79	
Emblems Sold		168.00	
Subscriptions to Journal		163.08	
Advance Registration Fees—Net		3,080.00	
Total Receipts			$70,843.37
			$95,841.32
DISBURSEMENTS			
General Fund		21,023.80	
Dues Forwarded to A.M.A.		30,125.00	
Public Relations Fund:			
A.M.A. Assessments	425.00		
State Expenses	5,956.34	6,381.34	
Medical Journal Fund		16,711.69	
Convention Fund		4,256.72	
Total Disbursements			$78,498.55
BALANCE—DECEMBER 31, 1950			$17,342.77
Cash in Bank, December 31, 1950		$17,342.77	

GENERAL FUND

Statement of Receipts and Disbursements for the Calendar Year of 1950

BALANCE—JANUARY 1, 1950			$ 3,514.85
RECEIPTS			
Dues	$19,635.00		
Less: Refunds	60.00	$19,575.00	
Interest on U. S. Bonds		440.00	
Received for Collection A.M.A. Dues		297.50	
Total Receipts			$20,312.50
			$23,827.35
DISBURSEMENTS			
Salary—Executive Secretary (less payroll taxes)		5,670.12	
Office Salaries (less payroll taxes)		4,599.90	
Office Supplies and Expense		953.41	
Office Rent		1,625.00	
Telephone and Telegraph		385.67	
Postage		484.00	
Travel		2,462.98	
Miscellaneous Dues, etc.		838.41	
Social Security		318.14	
Secretary's Conference Expense		386.38	
Withholding Tax		1,932.70	
Mimeographing		412.17	
Expense of Meetings—Council and Association Committees		1,054.92	
Total Disbursements			$21,023.80
BALANCE—DECEMBER 31, 1950			$ 2,803.55

AMERICAN MEDICAL ASSOCIATION DUES

Statement of Receipts and Disbursements

Calendar Year 1950

DUES COLLECTED FOR A.M.A.	$30,425.00
DUES FORWARDED TO A.M.A.	30,125.00
BALANCE DUE A.M.A.—DECEMBER 31, 1950	300.00

THE WEST VIRGINIA MEDICAL JOURNAL

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Vol. XLVII JUNE, 1951 No. 6

BREECH PRESENTATION*

By ROY T. RAPP, M. D.,
Williamson, W. Va.

Of the obstetrical problems that confront the practitioner one of the most troublesome probably is the breech presentation. The seriousness of this situation is emphasized by the fact that the fetal mortality ranges from 3 to 20 per cent, and injuries to the maternal soft parts, hemorrhage, and a higher general morbidity and mortality are encountered. It has been stated that the management of this problem is one of the best tests of a doctor's obstetrical ability.

Although the cause of breech presentation is not definitely known, the textbooks for years have listed such things as prematurity, placenta previa, hydrocephalus, multiparity, multiple pregnancy, contracted pelvis and pelvic tumors as etiologic agents. These, however, as Stevenson[1] points out are "disconnected reasons given without regard for underlying functional principles which might exert a standard influence under all circumstances." Some authors group the etiologic factors under two basic "theories." The first is the so-called "gravity theory" and the second, the "accommodation theory." Years ago Veit[2], Duncan [3], Schatz[4] and Seitz[5] conducted some classical experiments concerning the effect of gravity upon fetal presentation. Schatz suspended the fetus in liquor amnii and found that the breech always sinks. One would conclude from this that if gravity is the only factor concerned breech presentation would be most common. The concensus at the present time seems to discount the gravity theory although it may be a factor particularly in the early months. The accommodation theorists contend that the fetus adapts itself to the inside of the uterus and that various factors in and out of the uterus may influence the fetal position.

Two papers by Vartan[6] which have since been widely quoted and discussed appeared in the English literature in 1940 and 1945. This author contended that the breech presentation was not only common in early pregnancy but normal and that as pregnancy advances for some unknown reason the fetus will undergo spontaneous cephalic version by about the 32nd week unless something prevents it. He contended that the extended attitude (frank breech) of the legs is a major factor in preventing spontaneous cephalic version. Although Vartan does not seem to think so, it would appear that his theory is of the accommodation variety. Stevenson[1] in his recent article points out that the cornuo-fundal implantation of the placenta can be casually operative in the persistence of breech presentation of the human fetus at or near term in single term pregnancies. His studies of soft tissue x-rays of the placenta with many of the placental sites verified by uterine exploration led him to the conclusion that "cornual implantation of the placenta causes the fundal pole of the amniotic sac to have relatively the same size or capacity as, or even a smaller capacity than, the lower uterine segment pole of the sac. Since the fetal head is smaller than its breech and legs the head will tend to accommodate itself to the smaller pole of the amniotic sac ovoid while the breech will tend to accommodate itself to the larger lower uterine segment of the sac."

Although this a very intriguing subject it is not within the scope of this discussion to proceed in

*Presented before the Mingo County Medical Society, at Williamson, Oct. 11, 1950.

any detail with the etiologic pros and cons. However, for practical purposes let us try to integrate the various bits of information and construct a brief theory as to what happens to the fetus from conception until birth as far as presentation is concerned. Suppose that in the early months of pregnancy because of the greater weight of the buttock (Schatz) the fetus presents by the breech. As pregnancy advances we know that for some reason the incidence of breech presentation decreases. Weisman[7] made x-ray studies from the twentieth week of pregnancy until term and showed that from the 18th to 22nd week 24 per cent of fetuses present by the breech. This incidence decreases to 8 per cent by the 28th to 30th week and to 7 per cent by the 34th week. At term we know that the incidence is about 3 per cent. Possibly the weight of the head increases and tends to favor spontaneous cephalic version? Suppose that this process of spontaneous cephalic version continues and by about the 32nd week all of the fetuses have undergone spontaneous cephalic version unless something has prevented this process. Some of the interfering factors may be: (1) the extended attitude where the legs of the frank breech splint the body and prevent version, (2) small amount of amniotic fluid (this condition may be a factor in causing the frank breech), (3) cornuo-fundal implantation of the placenta (Stevenson) making the fundus the smaller pole (thus the head which is smaller than the breech and legs is maneuvered into the fundus and (4) bicornate uterus, tumors, multiple pregnancy, et cetera. The accommodation factors, of course, do not exert as much influence in the multiparous patient as in the primiparous. This may account for the decreased incidence of breech presentation in the multiparous.

Inasmuch as the breech presentation is not desirable, is there anything that can be done to remedy the situation?

External cephalic version has been advocated as a corrective measure. Ryder[7] wrote an excellent article on the subject. In reviewing this and other material it is striking that most of the observers fail to emphasize the overall incidence of breech presentation in their deliveries. It is interesting to note that even after numerous versions the incidence of breech delivery at term is still in the neighborhood of 3 per cent.

To test personally the practical value of external cephalic version I tried it in 100 consecutive cases of single breech presentation that came to my attention. Multiple x-rays were made of all these cases. Although the number of cases is insufficient to allow for any definite conclusions the experience did give me an opinion based on limited experience. In sixty cases (60 per cent) external cephalic version was successful but reversion occurred in sixteen (16 per cent). In some of the reversion cases, external cephalic version was repeated three and four times. Failure to maintain version in these sixteen cases was attributed to bicornate uterus (one case), possible cornuo-fundal implantation of placenta (6 cases), the films were not quite clear, undetermined (9 cases). All of the successful 60 per cent were before the 30th week. Of the remaining 40 per cent external cephalic version was not accomplished in any case. In twelve (12 per cent) of these cases version was attempted after the 32nd week. In two of these the extended attitude was present. No definite reason could be found for the failure in the other ten. In the other twenty-eight cases (28 per cent) version was not attempted because the patient was admitted to the hospital in advanced labor and had had no previous prenatal care.

SUMMARY OF RESULTS

Total number of breech presentations		100 (100%)
Successful E.C.V.		60 (60%)
	All before 30th week.	
Spontaneous reversions		16 (16%)
Possible causes of reversions:		
1—Bicornate uterus		
6—Possible cornu-fundal implantation		
9—Undetermined		
Unsuccessful E.C.V.		40 (40%)
Attempted after 32nd week	12	
Extended attitude		2
No definite cause		10
Not attempted because patient was admitted in advanced labor	28	

In reviewing all of these films after Stevenson's paper appeared, although the films were not taken by soft issue technic, it is remarkable that in those films that showed the placental outline a large number appeared to be in the cornuo-fundal area. The over-all incidence of breech presentation at term even after the above mentioned efforts was still 4.8 per cent. This figure, however, is rather confusing because most of the cases were seen in two clinics which received a large number of breech referrals. From this and subsequent experience without any attempt at exhaustive analysis it is the opinion of the writer that even though external cephalic version has a definite place in our obstetrical armamentarium and should be employed it cannot be relied upon to eliminate the breech presentation at term. Therefore it seems that in order to reduce the infant mortality we must examine our method of conducting the breech delivery.

Some obstetricians advocate and practice extraction as soon as the buttock is visible at the

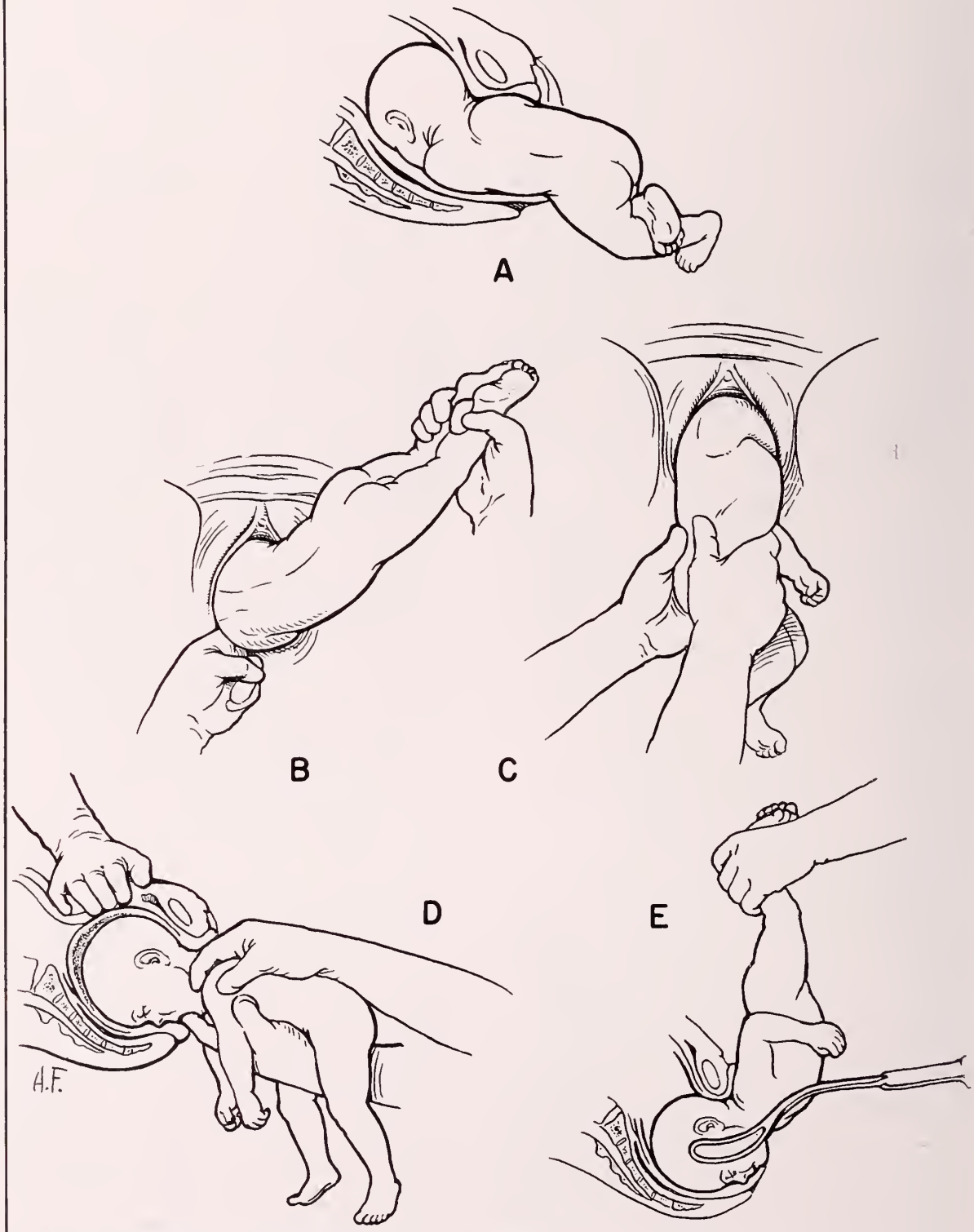
vulva. Others do not wait this long but perform this operation as soon as the cervix is dilated. Potter[8] for many years did hundreds of versions and extractions on women with perfectly normal cephalic presentations. His primary indication was to eliminate the "pains and agonies of the second stage of labor." It is hard to believe that operative deliveries of this type do not damage the infant despite claims to the contrary. A strictly conservative attitude would be, of course, complete noninterference, allowing the patient to deliver entirely spontaneously without any traction being employed and without any manipulation other than support of the infant. This procedure can be followed in some multiparous patients but in general the partial breech extraction is advisable in multipara and practically all primipara. The infant is expelled as far as the umbilicus by natural forces. The remainder of the body is extracted by the attendant.

Because a breech labor usually is longer than that in cephalic presentation it is important to make the patient as comfortable as possible. In attaining this end gaining and holding the confidence of the patient and family probably are more important than administration of drugs. Read's[9] successful practice of natural childbirth is built almost entirely on this principle. Many times a screaming patient and an edgy family pressure the obstetrician to interfere and endanger mother and child.

On admission of the patient in labor the writer usually administers Seconal grains 3 and Demerol 100 mg. After the patient has been prepared and an enema given the examination is conducted. If everything is satisfactory, the patient is assured and such statements as the baby is upside down and others of like nature is avoided. She is told approximately when the baby will be born and assured that as her contractions become stronger sufficient medication will be administered to keep her comfortable. At necessary intervals Demerol in 100 mg. doses is administered. As much as 400 or 500 mg. are administered during a long labor. Additional Seconal usually is avoided because from clinical observation this seems to depress the infant more than the repeated doses of Demerol. The patient is encouraged to sleep and the family to stay in the waiting room. When delivery is imminent the patient is transferred to the delivery room. The patient is further encouraged and told to bear down with her contractions. As soon as the buttock "crowns" the perineum is injected with 1 per cent novocaine and a left mediolateral episiotomy performed. This operation not only protects the mother from extensive tears but facilitates delivery, especially of the aftercoming head. In prematures and some multipara the episiotomy sometimes can be omitted. Delivery is allowed to proceed spontaneously until the umbilicus has been born. It frequently has been stated that not more than eight minutes should elapse after this stage for completion of delivery if a live baby is to be expected. This is not quite true. Furthermore, eight minutes is quite a long time and frequently the shoulders can be delivered spontaneously and the head leisurely extracted in less than five minutes. The arms are normally crossed over the chest. If traction is started too soon the arms go up around the head and interfere with easy delivery. Also, the flexed head aids materially in delivery. This is disturbed by premature traction. Flexion can be maintained by having the nurse maintain moderate downward pressure on the fundus as soon as the breech begins to emerge from the vulva. It is very important to favor downward traction until at least the lower half of the scapulae are outside of the vulva and not to worry about delivery the shoulders until one of the axillae becomes visable. Although there is more space in the posterior and lateral segments of the pelvis than in the anterior and some men always attempt to free the posterior arm first, as long as the arms maintain their normal flexed attitude over the chest it is better to free the shoulder which has a tendency to be born spontaneously. After delivering the shoulders the body is then rotated so that the sagittal sulture is in the antero posterior position preferably with the face down. If the head cannot be delivered by a very gentle Mauriceau maneuver combined with suprapubic pressure the Piper forceps should be applied to the aftercoming head. Although the Mauriceau maneuver has been termed by some as obsolete and the cause of fracture of the clavicle, hematoma of the sternocleidomastoid and Erb's paralysis it is important that one be familiar and experienced with this procedure because forceps may not always be available.

Nothing has been said about auscultation of the fetal heart tones. This, of course, should be done after every pain before the breech is expelled from the vulva. This is one of the best ways of detecting fetal distress which may necessitate extraction. However, one should become experienced in listening for the heart tones because they are at times difficult to hear because of rotation of the baby's body, thick abdomen, et cetera. Nothing has been said about the special maneuvers used in delivering the breech. In practice these are needed only occassionally and are described in detail in the textbooks.

PARTIAL BREECH EXTRACTION



(A) Delivery allowed to proceed spontaneously until at least umbilicus is born. Favor downward traction until at least lower half of the scapulae are outside of the vulva.

(B) Some free posterior shoulder first because of greater space in the posterior and lateral segments of the pelvis. It is better to free the shoulder which has a tendency to be born spontaneously.

(C) Anterior shoulder delivered by downward traction. Suprapubic pressure maintained by assistant to prevent extension of head.

(D) Infant's body rotated to bring sagital suture in the A.P. position. Head delivered by Mauriceau maneuver combined with supropubic pressure.

(E) If delivery is not accomplished easily Piper forceps applied.

In conclusion let us again emphasize conservatism. A very good friend of mine told me a story about an incident that occurred when he was in medical school. It seems that the professor came to class at the end of the course and announced that he was going to tell the students about a wonderful obstetrical instrument that should be kept around whenever the question of radicalism arose. After an appropriate buildup the professor pulled out a cigar, lit it and announced that that was the secret weapon, and advised the class to light a cigar and wait before taking any drastic steps. I have always remembered this and think it is sound advice.

SUMMARY

1. In breech presentation a higher fetal and maternal mortality and morbidity rate is encountered than is the case in cephalic presentation.

2. Although definitely of value external cephalic version cannot be relied upon to eliminate the breech at term.

3. In delivering these cases conservatism is recommended. Complete extraction should not be a routine procedure. A "relaxed" partial extraction is much safer for mother and infant.

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PEDIATRIC PENDULUM SWINGS BACK

Pediatrics has gone from the extreme of untrammeled license to the opposite extreme of meticulous regimentation. Finally, it has swung back to the starting point.

I believe that the best course lies somewhere between these two extremes, and offer a possible solution. I urge every pediatrician and family physician who deals with children to chart a sensible course for his patients and their mothers, relying on his own good sense and experience rather than on the latest pediatric fads and fashions.—Frank H. Richardson, in N. C. Med. J.

PNEUMOPERITONEUM IN THE NEWBORN*

By McLEMORE BIRDSONG, M. D., and
EUGENE M. FRAME, M. D.,
Charlottesville, Virginia

The purpose of this paper is to report two cases of pneumoperitoneum and the results of our investigation to find the incidence of the condition in the newborn.

Within a period of two weeks two babies were born at the University of Virginia Hospital on whom a diagnosis of pneumoperitoneum was made shortly after birth. In both cases the etiology was obscure and remained so. The course exhibited by both babies was rather surprising in view of the present knowledge of the pathogenesis of this condition.

Case 1—M. S., a female weighing 2778 grams, was admitted to the white nursery on 11/1/49. She was apparently normal at birth.

The mother was a 25 year old white multiparous patient who had previously given birth to 3 normal babies without pregnancy or labor complications. She had developed secondary anemia during her last trimester of the pregnancy in question which was corrected with one blood transfusion. She was admitted at term and delivered spontaneously from L. O. P. position after 10 hours 58 minutes of normal labor.

A general physical examination of the baby on admission to the white nursery was essentially normal. Glucose and saline which is routinely given 12 hours after admission to the nursery was regurgitated but at the time this was thought to be of no significance.

Because the mother was scheduled for an operative procedure on the baby's second day, an evaporated milk formula in amounts of 1/2 ounce every 4 hours was offered. These feedings were refused and at 8 p. m. the baby vomited a large amount of thick, yellow mucus. The vomiting occurred again the following morning and at this time it was noted that the baby's abdomen was distended and tympanitic. Peristalsis was absent. The remainder of the physical examination was normal, and it is noteworthy that on rectal examination normal meconium could be identified.

Because of the distention and the evidence of intestinal obstruction a flat plate of the abdomen was requested which revealed considerable free gas in the peritoneal cavity beneath both leaves of the diaphragm. There was some gas in the large bowel and few bowel loops were moderately distended. It was thought that the findings rep-

*From the Department of Pediatrics, University of Virginia Department of Medicine, Charlottesville.

resented partial obstruction with rupture of a hollow viscus.

Intravenous fluids were started through a right saphenous cut-down and an abdominal exploratory operation was done. At operation it was thought possibly that some air was released upon entering the peritoneum. No fluid was encountered but both the large and small bowel were distended. The operation failed to reveal any point of perforation and thorough and repeated examinations of the entire bowel was negative except for the presence of a few small particles of meconium on a small bowel loop and a fibrinous reaction on the surface of two adjacent loops.

The baby was returned to the nursery in fair condition and placed on nothing by mouth, continuous intravenous infusions, dihydrostreptomycin and repository penicillin. She was maintained on intravenous fluids including plasma, saline and 5% glucose in water until the morning of the 4th postoperative day. The baby had a normal meconium stool within 24 hours after operation and postoperative distention was minimal. Her entire course was surprisingly smooth and her general condition remained good. A flat plate of the abdomen on her 3rd postoperative day was negative.

On the 4th postoperative day the baby was given equal parts of glucose and saline by mouth. This was tolerated well and on her 5th day she was given a routine evaporated milk formula in amounts of 15 cc's every 3 hours. Her general condition was such that the antibiotics were discontinued on her 5th day and she was given an oral polyvitamin supplement.

The baby showed a definite weight gain on her 6th day after operation and the remainder of her course was entirely uneventful. She was discharged on her 14th hospital day at which time she had regained her birth weight.

Case 2.—J. R., a male weighing 3175 grams, was admitted to the white nursery on 11/15/49. He was apparently normal at birth.

The mother was a 31 year old multiparous patient who had given birth in March 1946 to a normal full term female after an uneventful pregnancy and labor. The patient was followed here throughout her recent pregnancy and labor ensued at term after artificial rupture of membranes. Labor was rather slow but she had a spontaneous delivery after 18 hours from L. O. T. position.

Physical examination of the baby on admission to the white nursery was normal and he was

Fig. 1. Preoperative x-ray of Case 1, showing free air beneath the diaphragm.

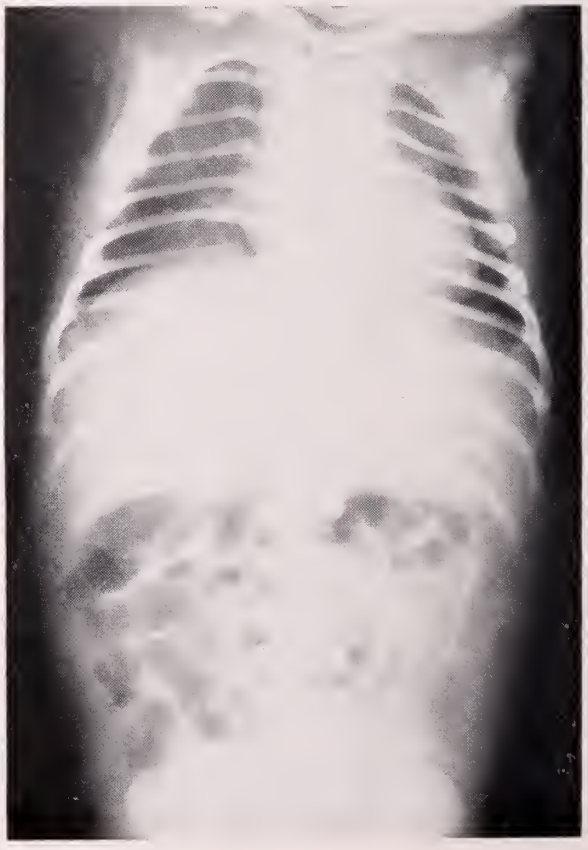

Fig. 2. Twenty-four hour post-operative x-ray of Case 1, showing complete resolution.

started on the nursery routine. Twelve hours after admission he was offered one ounce of equal parts of 5% glucose and saline which was refused. Fifteen hours after admission his temperature had fallen to 96.4 and external heat was applied. The baby took 1/2 ounce of the glucose and saline mixture 16 hours after admission and vomited approximately 10 cc's of greenish fluid 4 hours later. He had had 2 meconium stools which were normal in appearance.

When the baby was 24 hours old the nurses became alarmed because of cyanosis and lethargy. Examination at this time revealed marked cyanosis of the extremities and a dusky facial pallor. His cry was feeble and he was definitely lethargic. Breath sounds were questionably diminished on the left. A routine chest x-ray was ordered which was taken in the upright position. It showed free gas beneath both leaves of the diaphragm. A moderate amount of gas was noted throughout the bowel; however there was no undue distention. The lung fields were clear and the heart was normal.

It was difficult to decide on the management of this case and our decision probably was influenced by our recent experience with this unusual condition. The baby was treated expectantly with the hope that if there was a perforation he would care for it satisfactorily. It was felt that the hazard of expectant treatment was minimized by the fact that the gastrointestinal tract was patent from the duodenum down as evidenced by the passage of 2 normal meconium stools and that the gastrointestinal contents of the newborn are relatively aseptic.

The baby was given nothing by mouth, continuous oxygen and started on dihydrostreptomycin .05 g. every six hours and crysticillin 150,000 units daily.

On the morning of his 3rd day an intravenous infusion was started and 100 cc's of normal saline, 100 cc's of amigen and 150 cc's of 5% glucose in water were given by slow drip.

A repeat film the day after the diagnosis was established revealed some air remaining beneath the diaphragm but certainly no more than before.

On his fourth day the baby was offered glucose and saline which was taken readily and tolerated well. On his fifth day he was offered an evaporated milk formula in amounts of 1 ounce every 3 hours. At this time an upright x-ray study of the abdomen revealed complete resolution of the free air in the peritoneal cavity.

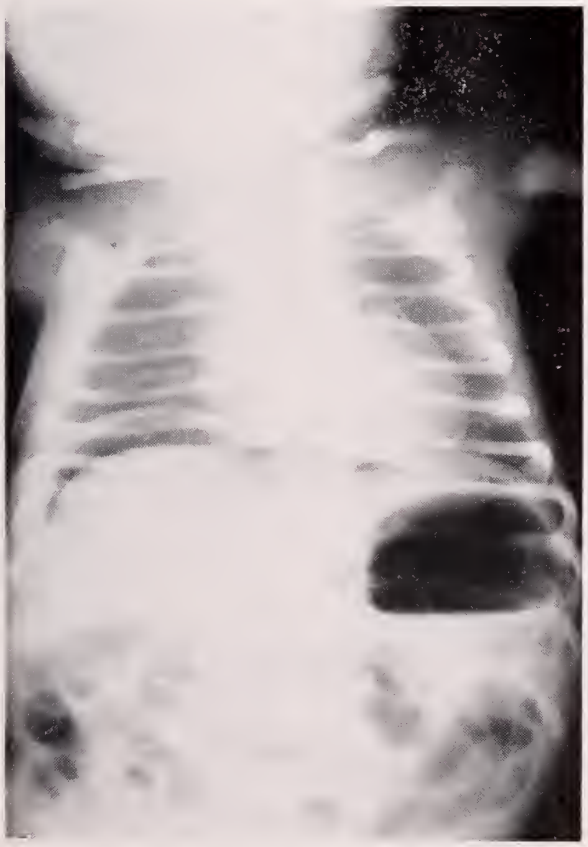

Fig. 3. X-ray examination of Case 2 twenty-four hours after birth, showing free air beneath the diaphragm.

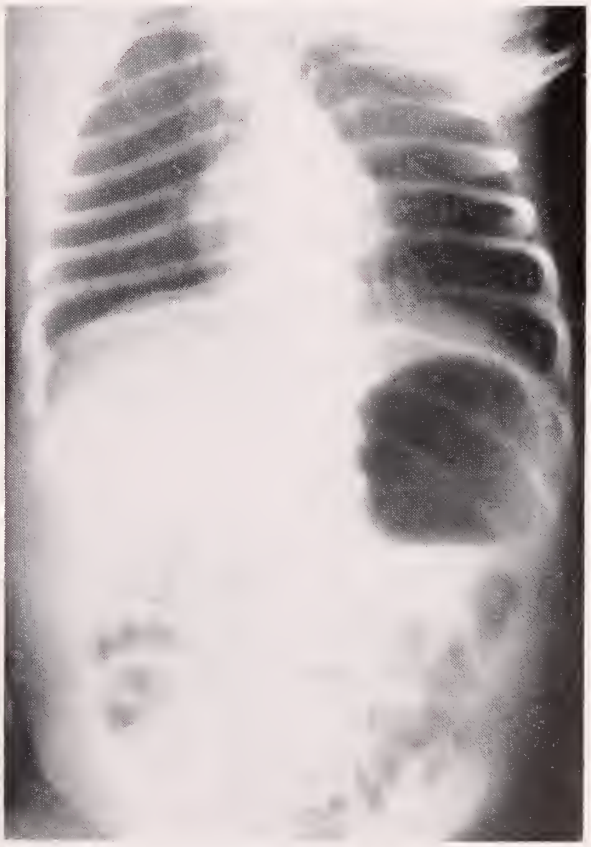

Fig. 4. X-ray examination of Case 2 five days after birth, showing complete resolution.

The baby did well until about his 12th hospital day when he became lethargic, started losing weight and would not eat well. A blood culture at this time grew Staphylococcus albus hemolyticus. The crysticillin and streptomycin had been discontinued on the 10th hospital day and when the report of the blood culture was available which was 13 days post delivery, crysticillin was resumed in amounts of 300,000 units daily. The baby began to gain on his 17th hospital day and was discharged in good condtion on his 23rd hospital day. At the time of discharge he was 283 grams under his birth weight.

This baby has been followed since discharge at regular intervals and his course has been entirely uneventful.

The routine chest x-ray probably is the most frequently used special diagnostic instrument of the newborn period. It is also true that most of these films are taken in the supine position, therefore the obvious question which arose was, "Could pneumoperitoneum be more frequent in the newborn period than is generally recognized because of failure to demonstrate it more often due to the usual x-ray technic and because of the suggestion that the condition can be relatively innocuous?"

With this in mind a routine upright flat plate of the abdomen was obtained on 80 consecutive babies within 24 hours after their admission to the white nursery and this study was repeated on the baby's 3rd hospital day. We failed to demonstrate free air in the peritoneal cavity of any patient in this study. The authors are cognizant of the fact that this small series is not statistically significant but circumstances did not permit further study.

DISCUSSION

A review of the literature did not disclose a reference to pneumoperitoneum in the newborn comparable to the circumstances under which our cases were observed.

Hinkel[1] reported a case of spontaneous pneumoperitoneum in a woman aged 70. This lasted 21 days and was attended with abdominal pain. The patient was not particularly ill and all laboratory studies were normal. No explanation for this could be found. However a lipoidal bronchogram showed a pulmonary bulla at the left medial pleural diaphragmatic reflection and it was suggested that the abdominal air conceivably could have been derived from rupture of this bleb.

The European literature (Mason[2]) makes reference to a condition in which the term *pneumotosis cystoides intestinalis* has been applied. This apparently con be congenital and is characterized by large numbers of gas containing blebs in the subserosal coats of the intestines. The lesions are more frequent in the distal portions of the ileum but may be present at any point in the gastrointestinal tract. Rupture of these blebs is said to be a cause of spontaneous pneumoperitoneum. The lesions can be demonstrated by x-ray.

Sidel and Walbarsht[3] made reference to spontaneous pneumoperitoneum in adults with lower lobe pneumonia. Fritz and Moberg (Hinkel[1]) describe a case in an 81 year old woman in which inflation was thought to be via the fallopian tubes because of vomiting in the knee chest position.

A rather complete list of the known causes of pneumoperitoneum in the newborn follows: (1) intestinal obstruction; (2) trauma; (3) meconium stasis; (4) congenital aplasia of the intestine; (5) vascular insufficiency of the intestine; (6) congenital intestinal diverticula; (7) acquired intestinal diverticula; (8) Meckel's diverticulum; (9) ruptured appendix; (10) mesenteric thrombosis; (11) ruptured ulcerations of the gastrointestinal tract.

It can be seen from a perusal of this list of causes that pneumoperitoneum in the newborn, as we have understood it, usually is secondary to conditions that require prompt and often heroic measures of treatment. Our cases question the validity of this attitude. If the patency of the gastrointestinal tract is apparent, is expectant therapy using antibiotics and parenteral fluids justified? The other question that our experience raises is whether or not the condition is more prevalent than generally supposed because of the usual x-ray technic of studying newborns and because of the fact that the condition apparently can be without markedly disturbing symptoms and can resolve spontaneously without residual symptoms.

SUMMARY

1. Two cases of pneumoperitoneum are reported. One case was operated upon without a definite break in the gastrointestinal tract being found. The second case was treated conservatively. Both patients recovered.

2. Eighty consecutive newborns had flat x-ray examinations of their abdomen in an upright position and no evidence of peritoneal air was noted.

3. A list of the known causes of pneumoperitoneum is given.

4. The question is raised as to whether or not it is necessary to operate on all newborns who exhibit pneumoperitoneum.

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CONQUERING FEAR

Dr. Paul White, the eminent cardiologist of Boston, spoke before a post graduate session of the American College of Physicians in Philadelphia recently. He urged that we physicians carry a message of courage, faith and accomplishment to our patients He decried the emphasis on fear, anxiety, and uncertainty that unthinking societies and physicians instil in our people.

As physicians who minister to the whole patient, not to just his psyche or his soma or his disease state, we must work shoulder to shoulder with the minister, the priest and the rabbi.

We have a duty to bring courage, confidence and hope to our people.

We are a great people, we have lengthened the space of man's existence by many years. With the help of God we will remain a great nation.

Let us examine all our contacts with our patients in the light of bringing comfort—physical, spiritual and moral—to our patients and friends.

Let us, in our humble way, carry out God's mandate. —C.P.P. in Bulletin, Columbus Academy of Medicine.

GERONTOCRACY

The movement for the care of the aging with its pensions and forms of assistance is too new in our Western civilization for the establishment of the necessary basic concepts. It must be understood and, in fact, underwritten by members of all the various age groups.

If we interpret Oriental customs and traditions correctly, a system which might well be termed "gerontocracy" has obtained for centuries among the family groups in rural China, where the first consideration of the dutiful son is the care of the dominating father.

Granting that this filial devotion stems primarily from the uncertainty the son has in terms of his own security in old age, it would seem that our completely impersonal approach not only puts a very disproportionate emphasis on dollars that vacillate in value but actually tends to disrupt the ties of personal and family responsibility. Every social worker sees this happening.

We are building up a vast army of displaced elderly people. While it is true that a few Baruchs and Stimsons are used in high places, big business, aggressive unions and government itself, our civilization as a whole shows little evidence that a "council of elders" is encouraged, not to say tolerated.—E. L. Tuohy, M. D., in Geriatrics.

THE RELATION OF THE PUBLIC HEALTH DEPARTMENT TO THE PRIVATE PRACTICE OF MEDICINE

By ROGER A. KENNEDY, M. D., D.P.H., F.A.P.H.A., Morgantown, W. Va.

The title of my address is somewhat ill chosen because actually what I want to discuss is the relation of this county health department to the private practice of medicine here in Monongalia County. Quite certainly this is not a topic I can talk about by myself. I can give you my ideas and you will, I hope, consider them; but if my department is to be run successfully it must be conducted in accordance with your wishes. I am here tonight to receive your instructions.

In the most general terms, public health services try to fill the gap which exists between the person who is entirely healthy and the person who is in need of clinical treatment. The range of this gap will vary from place to place; it will vary according to the social needs of the population; it will depend on the economic grouping of the people; it will be changed by other circumstances; but most important of all it will vary with the wishes of the practicing physician, that is, how far he wishes to enter upon preventive medicine or how far he will tolerate the health department conducting diagnostic or treatment clinics. This is why I say that my department must be guided by you.

As a basis for discussion I should tell you my concept of public health work. There are five main divisions and in four of these there is plenty of room for misunderstanding between us. The five are environmental sanitation, control of communicable diseases, health education, social machinery and special services. I doubt that it is necessary to do more than mention environmental sanitation because it is unlikely that friction will arise between us in this matter; it is the other four that I am worried about.

CONTROL OF COMMUNICABLE DISEASES

The control of infectious illnesses has two aspects: what is done when a case is diagnosed and what is done in prevention. In the first we both have statutory obligations with fairly well defined fields of service. Difficulties might conceivably arise in tuberculosis and venereal disease, especially in contact tracing and case follow up but routines are so well established that neither of us is at all likely to resent the efforts of the other.

I am much less happy about preventive measures of which immunization is by far the most important. Should the health department immunize? I am not sure that it should. To my way

of thinking immunization is an integral part of the preventive procedures which the private physician will as a matter of course perform for his infant clientele and it seems to me a pity that there has been such a vogue for separating immunization from general pediatric care. I would be perfectly content to confine our activities in this matter to stimulating parents to take their infants to you for immunizations provided we are all in agreement on immunizing practices. I must make this proviso because nothing is more discouraging to us than persuading a difficult mother to take her infant to be immunized at 4 months of age only to have her turned away by the doctor because he doesn't approve of starting this protection until the child is 6 or 8 months old.

On the other hand public immunization clinics are rather generally accepted and a certain number of families must make use of such a facility (unless you will accept the non-payers as part of your overhead). But if we do conduct these clinics I hope you will see that we can make no selection of cases. We must take care of all who come regardless of whether they are paying patients of yours or medical indigents. Of course we can (and do) mitigate that nuisance to some extent by our approach. We say in effect, "Have your child immunized by your family doctor or by the health department" instead of "Have him immunized by the health department or by your own doctor." (In subsequent discussion it was the opinion of the meeting that doctors would have no difficulty in keeping for immunization those infants who were brought to them for regular medical supervision and that the health department would therefore not be trespassing by conducting public clinics. It was also generally agreed that primary immunization with triple antigen should be completed by the seventh or eighth month of life and that the first booster should be given within the ensuing year. Smallpox vaccination could conveniently be performed along with the other immunization or even earlier.)

HEALTH EDUCATION

Of all health department functions health education is the most important. It is the major reason for our existence and it is the goal to which all our efforts are directed. Our difficulty is to make satisfactory contacts with the public. Lectures, talks, films and discussions reach only people already interested, the groups least in need of information. Contacts made with parents through the schools nearly always have their origin in some defect of the child which, though a useful practice approach, is not a good psychologic one because the parents are consciously or unconsciously on the defensive. The same is true of every unsolicited approach we make. It is seldom realized how exhausting and difficult it is for a public health nurse first to sell herself on the doorstep and then when she has gotten into the house to put over her educational message. We are therefore always on the lookout for invitations and similar opportunities which will ease our burden. About the only way our nurses ever get these opportunities is by offering or taking part in some service and this usually means a clinic service.

This is my basic philosophy about clinics. The people we especially desire to educate in simple health practices will not come to us for that purpose. They will come to us for free service. We don't particularly want to give this service but are prepared to do so because of the educational opportunities which it opens to us and, I must add, because if we don't have some clinic services a proportion of the population may have no place to go for advice.

If a health department conducts its clinics in this spirit it is less likely to run afoul of private practitioners because it will not be seeing many people who would ordinarily be paying patients.

Ideally every clinic should be in charge of a doctor if for no other reason than to insure that everyone who is in need of referral is referred to a private practitioner or outpatient department for treatment. It is a very bad blot on our copy book if a serious or urgent case is missed. I assume we agree that here the medical supervision will have to be drawn from your ranks—the ranks of the general practitioners and specialists—so I need not enlarge on the difficulties of clinics conducted by local doctors, that is the time involved, the insufficient remuneration, the breakdown if the doctor has an emergency in his own practice, the awakwardness when private patients (especially someone else's) come to a free clinic, and so on.

Many of you have been very generous with your help and I hope you can continue this. But if the demands of the Armed Forces deplete your number we shall have to make do (as we are now doing in a number of instances) with nurse-conducted conferences instead of medically supervised clinics.

From my point of view these conferences are fairly successful because they do attract some of the people we want. But you will realize the pressure which is put upon the nurse to exceed her rightful duties and how very easy it is for her remarks to be wishfully misinter-

pretcd. She may for example have to make some sort of tentative diagnosis and tell it to the mother in order to induce her to take the child to a doctor. And that of course is how misunderstandings arise between you and me about the conduct of my staff. I can see only two solutions: one good but apparently impracticable and one very makeshift. The good one is to have all clinics supervised by a doctor; the other is for you always to give us the benefit of the doubt, to believe that we are doing our very best to be entirely ethical.

While I am on this topic of making contact with individuals we want to educate there is a request I wish to put before you. I would like my nurses to make home visits to all new mothers as soon as possible after they are released from the hospital. It is then that the nurse is welcome because she can help with the baby's first home bath, the umbilical dressing and things like that. This first welcomed visit makes subsequent educational contacts very much easier. As things are now we have to wait for birth registrations to come in, so it may be as long as six weeks before we get to the home. In order to obtain early notification of births to find out whether the mother wants us to visit her, and to get exact information about where she plans to go on discharge from the hospital, may I send one of my staff on to the maternity floors of the hospitals to talk to the mothers and find out these things? I think I would send a nonprofessional staff member rather than a nurse since such a person is likely to be regarded with less suspicion by the floor supervisors and hospital authorities. (Permission to do this was granted).

Now, turning to the last two branches of public health work, I can be much briefer because I need only to state my views.

SOCIAL MACHINERY

By this I mean all things directed to producing a way of life by which people can live healthily. After all, I am interested in health for the people and they can't be healthy if they live in hovels or slums, if they have no social security, if they cannot afford proper clothes or adequate food.

Any legislation, any voluntary effort genuinely directed to ameliorating bad standards of living must have my support. But I take the attitude, a cowardly one perhaps, that it is my duty only to indicate where unsatisfactory conditions exist and to bring these to the attention of groups organized to correct them. It is not my job to take over the work of the reformer or the economist.

SPECIAL SERVICES

Finally we come to special services. By this I mean all the things that are done by, or with the close cooperation of, health departments over and above the basic work of public health.

Public health has grown enormously in the last quarter century and in the past few years has tended to press more and more into new fields. Under certain circumstances there can be no objection to this. If the groundwork of public health has been well done, if there is plenty of money available for expansion without curtailing basic services, if new services can be integrated without creating friction in the whole structure of medical care, then these new fields are well worth exploring. But if a local health department enters upon new work by skimping essential services or merely in order to do something because big cities or wealthy foundations are doing it, then I believe it will run into all sorts of trouble.

Our position here is peculiar. Our basic work is not being done altogether satisfactorily, partly because of lack of nursing staff and partly because our integration with medical and community resources has not had the attention it should have. But because this is a university town with a medical school we are under constant pressure to engage in demonstrations, to offer field experience to university members and in general to advance faster and further than we ought. And as you know so much better than I do, this community, especially the mining areas of it, has many medical indigents who present a very complex health and welfare problem.

Any health department likes to point with pride to the facilities available to it such as the school medical service, the school treatment service, the mental health clinic, the pediatric clinics, the speech correction services, the child guidance clinic, nutritional surveys, housing surveys, cancer control and cancer diagnostic services, dental clinics, fluorination clinics, multiphasic diagnostic clinics and so forth. As these items are offered (and they are being offered) by the state and federal authorities and the University, the temptation to accept them is very strong, far too strong for me to resist. I hope that so long as the dangers are recognized they can be avoided. The dangers I particularly fear are disruption of my basic work and the increased chance of misunderstandings between you and me which every extension of services will entail.

It shall be my duty to insure that you are informed of any contemplated extensions of our program, that your advice will be heeded, that

all diagnostic clinics that may be established will be staffed by clinicians and not by health department administors, that these clinics will in so far as possible be limited to patients in financial need or patients referred by you and that all treatment ordinarily shall be carried out by established practitioners and not as part of the clinic routine. If I stick to this I believe we shall get on all right together; if I deviate from it I don't doubt your displeasure will be more than vocal!

PSYCHIATRIC APPROACH TO THE CLIMACTERIC

Coronary thrombosis is unfortunately common. Master has estimated that close to one million cases occur annually in this country—one in every 30 males and one in every 90 females over 40 years of age; and, since the majority survive a decade or more, the total number of living people who have had coronary thrombosis presumably numbers at least several millions.

In view of the evidence that life expectancy following acute coronary thrombosis is fairly good, it becomes apparent that to exclude for years these millions of persons from gainful employment introduces considerations of vast social and economic importance and demands proof that these millions cannot or should not work. However, there exists already a large and growing mass of evidence showing that most of these persons can do useful work for long periods of time and without apparent harm.

Almost every physician knows from personal experience that survivors from acute coronary thrombosis frequently return to work, either with or without medical advice and approval, and may live useful and satisfactory lives for years.—Arthur J. Geiger, M. D., in Industrial Medicine and Surgery.

REFERENCES

Almost every paper written on any branch of medicine or surgery ends with a list of references to previous work in the same field. Such is the custom; and few articles would be accepted for publication if they did not respect it. But do these references serve any useful purpose, and does the reader ever look them up? The general medical reader whose interests lie elsewhere will never have the time, and the specialist in the same field already knows about them.

The references are easy enough to obtain. A request to the Royal Society of Medicine will bring by return of post a list as long as your arm. It seems to me that references are often a form of academic snobbery. The longer the list at the end the better the paper appears to be; and many a minor potboiler can be made to look impressive by a skilled librarian with a well-kept card-index.

Is it not time that Klumpferdinck X (1895) Munch. kleine Nachtmusik, 79, 5674 was swept away? Mr. Klumpferdinck must by now have exceeded his quota of glory.—The Lancet.

DIAGNOSIS AND TREATMENT OF RENAL TUMORS*

By GUSTAVUS A. HUMPHREYS, M. D.**
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Although renal tumors have been recognized for well over a century Robin, in 1853, first gave a good description of the derivation of the tumor from epithelial tissue. The term "hypernephroma" was given to the commonest tumor of the renal parenchyma by Birch-Hirschfeld suggesting origin from an adrenal rest. This perpetuated the misconception originated by Grawitz in 1884 although Stork, in 1908, believed that these tumors were of nephrogenic origin representing histologic variants of renal tissue. Since these tumors show variations in structural composition with a mixture of clear and granular cells frequently existing in different parts of the same tumor numerous purely descriptive terminologies were promulgated. This led to such confusion that many preferred the term "hypernephroma" to more exact terminology. With the broader acceptance of the pathologic classification of Foot renal tumors are more readily classified. Hence the renal cell tumor is the present common terminology for that tumor previously categorized as hypernephroma.

To clarify the problem, the simplified classification is presented (Table I) for end results of nephrectomy can best be evaluated by pathologic type of tumor. In general, the renal cell tumors are those parenchymal tumors frequently called "hypernephromas" while the transitional cell tumors are those arising from the conducting apparatus, especially the pelvis. Embryonal tumors are parenchymal tumors arising from cell rests or atavistic cells, for example, the Wilm tumor. Other tumors of the kidney may arise from the fibrous capsule or vascular structures, nerves, vessels, et cetera.

The classical symptoms of renal tumor may be either hematuria or a mass in the flank; most commonly the hematuria is microscopic though occasionally gross blood is noted by the patient. In contrast to this finding in adults the most common finding in children is a palpable mass in the flank. This may occur in adults as well but probably manifests a later stage of the tumor. Pain in the area is sometimes noted and of course all of us are familiar with the cases in which the complaints are centered upon the metastatic site while the primary renal tumor is completely silent.

*Presented before the West Virginia Academy of General Practice, at Charleston, October 1, 1950.
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The study of such patients must be initiated by the general practitioner whose privilege it is to first suspect the possibility of renal tumor on the basis of his routine findings. The history and physical examination may or may not be significant but a voided specimen in the male and a catheterized specimen in the female will be most important in discovering early symptoms such as hematuria. When neither microscopic nor gross blood is found in the urine an intravenous pyelogram should be done. Since this x-ray evaluation of the patient's upper urinary tract is available to all of us who have x-ray facilities it should be employed much more broadly and frequently. It is probable that such a study will rule out the presence of tumor in many of the cases and confirm the presence of a kidney tumor in others. In the doubtful cases retrograde pyelograms can be made by the urologist. However the aforementioned steps must be taken if

TABLE I

Classification of Renal Tumors

	Type	Benign	Malignant
I. Derived from Epithelium of Parenchyma	Renal Cell	Adenoma	Carcinoma
II. Derived from Epithelium of Conductive Apparatus	Transitional Cell	Papilloma	Carcinoma
III. Derived from Rests or Atavistic Cells of Parenchyma	Embryonal		Carcinoma A. Predominantly Epithelial B. Predominantly Mesenchymal (Wilm)
IV. Derived from Supportive Tissue	Connective Tissue, Fat, Muscle, Nerve or Blood Vessels	Fibroma Myoma Neurolemoma Angioma Lipoma	Sarcoma
V. Derived from External Sources by Invasion or Metastasis			Sympathoblastoma Pheochromoblastoma Metastatic Carcinoma

	Total Cases	Determinate Cases Before 1945	Determinate 5-Year Survivals	Percent 5-Year Survivals
Renal Cell Carcinoma	125	77	25	41%
Transitional Cell Carcinoma	36	15	0	0
Transitional Cell Papilloma	9	7	7	100%

we are to confirm or rule out a suspicion of renal tumor in its early stages.

Since Gustav Simon in 1866 performed a nephrectomy for a urinary fistula and proved that such an operation could be done and the patient survive, the basis for therapy of renal tumors was established. In 1877 Jessop of Leeds, England performed a successful nephrectomy for a tumor but the patient died during the ensuing month. Apparently the first alleged cure of a renal tumor was by nephrectomy performed by Byford in the United States in March 1878. This patient lived, to die later of alleged natural causes. Dr. R. P. Harris in July 1882 presented a series of 100 nephrectomies. Since then the procedure has enjoyed broader acceptance and has had many refinements leading to a lower mortality. However its benefits probably have remained about the same.

For this study all cases of renal tumor at the New York Hospital between 1932 and 1949 were reviewed. Cases with inadequate pathologic material were rejected. Microscopic sections and clinical records were reviewed and follow-up data were obtained for all the cases to which this series is limited.

From the 125 cases of pathologically proven renal cell tumor a study of survival was undertaken. There were 77 patients subjected to nephrectomy for renal cell carcinoma before 1945. Sixteen of these cases were indeterminate. Of the 61 determinate cases of renal cell carcinoma 25 (41 per cent) were alive 5 years after nephrectomy. Thirty-nine patients were subjected to nephrectomy for renal cell carcinoma before 1940. Of the 29 determinate cases of renal cell carcinoma 7 (24 per cent) were alive 10 years after nephrectomy.

Since all postoperative deaths are included in the preceding figures and some of these patients were suspected of having metastasis at the time of nephrectomy the 5 and 10 year survivals are most gratifying. Only 3 patients had proven metastasis at the time of operation and none of these survived over 3 years. Some patients in whom metastasis developed postoperatively survived for many months. Survival beyond the fifth year does not infer a cure of the disease. These tumors by virtue of their leisurely rate of growth often require a 10 year observation period for a definitive evaluation of prognosis. Study of 7 ten year determinate survivors following nephrectomy for renal cell carcinoma revealed tumors from 4.5 cm. to 17 cm. in greatest diameter demonstrating that size alone was not the decisive factor in the 5 or 10 year survival since others with smaller tumors died of cancer far sooner. Also, there was nothing distinctive in any treatment to account for their survival. However 6 of the 7 survivors had types of tumors with histologic factors considered to parallel a favorable outlook.

Those renal cell tumors with clear regular cells having isometric nucleii arranged in cords and strands with thick dense septa offered the best prognosis while those with irregular granular cells having anisometric nucleii arranged in tubules and papillae with irregular thin septa offered the poorest prognosis.

In contrast to the relatively good survival rate in renal cell tumor the transitional cell tumor during this same period at New York Hospital showed a poor rate of survival. There were 17 patients subjected to nephrectomy for transitional cell carcinoma before 1945 of which 2 were indeterminate. Of the 15 determinate cases, there were no 5 year survivors. However in the same period 7 nephrectomies were performed for transitional papilloma of the renal pelvis. All of these were surviving 5 years postoperatively.

From these findings it may be assumed that nephrectomy gives satisfactory end results for renal cell carcinoma of the kidney. Nephrectomy for transitional cell carcinoma gives poor results due to the malignancy of the cancer. However it remains the procedure of election and evaluation of end results always should be done by pathologic type.

Embryonal tumors of the kidney do occur in adults as well as children. Those occurring in adults are primarily epithelial whereas those in children such as the Wilm tumor are primarily composed of mesenchymal components. The five year survival rate in the latter is particularly low. However an occasional one presents long term cure and as such the patient should be entitled to this chance even if the statistical probability is against the five year survival.

Miscellaneous tumors of supportive tissue give an expectancy paralleling similar growths elsewhere in the body. For example the malignant sarcomas offer a poor 5 year survival whereas those with fibromas, lipomas and neurolemmomas have a fine expectancy.

Hence, the commonest form of renal tumor—the renal cell carcinoma—gives a 41 per cent 5 year survival following nephrectomy which is a gratifying result in cancer surgery. The question often arises whether or not nephrectomy should be done in the presence of metastases. In such cases careful evaluation of the problem

should be undertaken. In general however the prognosis paralleled the prognosis for the secondary tumor under therapy. For example, an isolated metastasis in the shaft of the humerus sometimes can be handled quite readily by radiation and in such cases nephrectomy is warranted. An isolated metastasis in one lobe of the liver or the lung may well be removed surgically. One patient who had metastasis to the brain survived 4 years following removal of the brain tumor plus nephrectomy. He died however of recurrence of the brain tumor. Patients with multiple metastases particularly in the chest are poor candidates for therapy of any kind and in my experience nephrectomy has not proven warranted. Though an aggressive role should be maintained in the treatment of metastases from renal tumor careful evaluation of the therapy to be utilized upon the secondary site probably is more important than a generalized rule based upon nephrectomy.

Radiation of renal tumor may be best discussed as to whether or not it is utilized as a cure or palliation of the primary tumor. In Wilm's tumors it probably is extremely beneficial and will shrink the kidney preoperatively to an operable size if such is necessary. However its use routinely in the postoperative course of such tumors is commonly accepted. The value of radiation upon an enlarged primary renal tumor in an adult is very questionable. Since it will not cure the disease it is preferable to offer surgery. However in the event of metastases it will give some symptomatic relief if given over the primary site possibly with shrinkage of the renal tumor. The utilization of radiation for treatment of metastases to the long bones probably is the most effectual. Though radiation may have a palliative effect upon the multiple metastases to a chest I am not very optimistic that it will prolong the longevity and expectancy of that patient beyond a relatively minor degree. However a few months may mean a lot to the patient and as such even the more hopeless cases should not be denied this form of palliation.

Five and 10 year follow-up results give us a very gratifying percentage of survival following nephrectomy for the commonest forms of renal tumor. If we hope for any future improvement in the end results of treatment of renal cancer we must hope for earlier diagnosis in order to subject the patient to treatment at an earlier stage of the disease. Further progress will be dependent upon the careful work-up by the general practitioner.

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PSYCHRONEUROSES IN LATER LIFE

The tensions that arise in the human body seek methods of expression. If they do not soon find adequate instinctive and emotional release, they direct their force to that functioning system of the body which is most vulnerable. The system selected for the absorbing of tensions is dependent upon factors yet unknown. Undoubtedly heredity influences and predisposed constitutional weaknesses are of etiological significance.

The tensions often select the digestive, respiratory, reproductive excretory or muscular systems in which to produce distressing symptoms, but such sites of selection and the accompanying distress usually do not shorten objectively the course of the patient's life although they often seem to favor the development of organic conditions in the system affected. When the circulatory system serves to express these tensions, hypertension may arise and arteriosclerotic lesions develop which shorten the life span with cardiac or cerebrovascular accidents.

In can be seen that advancing age with its special biological, social and environmental circumstances influences the clinical picture of emotional as well as physical disorders. In treatment, prognosis and prevention of the emotional disorders of the aging, it is informative to consider the individual's personality development with reference to his assets in meeting the problems of later life.—Hollis E. Clow, M. D., in Geriatrics.

THE ESSENCE OF GENERAL PRACTICE

The essence of general practice is to live amongst your patients as a cog in the whole machine, knowing them so well in health and in sickness, and from birth until death, that although one may keep—and should keep—a clinical record of their illnesses, and although one should examine the patient as a routine, the patient is so familiar to his family doctor that he, of all people, can be in the best position to give an accurate diagnosis, prognosis and treatment most suitable to the patient's way of life.—Southern Medicine and Surgery.

ACTH AND SKIN DISORDERS

In most of the disorders of the skin that have responded favorably to ACTH and Cortisone, there is not according to present concepts any evidence of hormonal deficiency. This has been offered as an explanation as to why an excess of the hormone is required to produce favorable results.—J. F. in Ohio State Medical Journal.

THE CHOICE OF MEDICAL STUDENTS WITH ESPECIAL REFERENCE TO THE NATURE AND USEFULNESS OF THE MEDICAL COLLEGE ADMISSION TEST*

By GIDEON S. DODDS, Ph. D.,[1] and
EDWARD J. VAN LIERE, M. D.,[2]
Morgantown, W. Va.

The problem of choosing students has been one of the concerns of medical schools for many years. In the past few years, this problem has entered a new phase and has become increasingly acute. In the years immediately preceding World War II, the medical schools of our country could accommodate about half of those seeking admission. During those years, there were not enough well-qualified applicants to fill the quotas of all the schools and it was necessary to admit some whose chances for success in medical school appeared to be very small. Naturally, there were many failures, especially among students in the first and second years. During the war, the picture changed constantly and schools had but little opportunity for free and wise choice of students.

Since World War II, the number of applicants has increased far beyond any former experience without any commensurate increase in the capacity of Medical schools. Many of these applicants are well-qualified. Committees on admissions are now faced with the difficult task of making choice, not between qualified and non-qualified applicants, but within a group showing various degrees of commendable excellence, often with the necessity of rejecting students judged to be reasonably well qualified. As a result, the number of failures in medical schools has become less than in former years. Of course, this is a desirable result, inasmuch as reduction of losses due to failures is equivalent to a corresponding expansion of educational facilities for the production of needed physicians. Nevertheless, the situation places a grave responsibility upon those men who must make this choice and must try to draw dividing lines where none are clearly evident.

During the past 20 years a serious effort has been made to improve the selection of students, both by individual schools and also by the Association of American Medical Colleges. As a part of this effort, various tests have been devised to supplement the collegiate records and other sources of information about applicants. From 1930 to 1945 the Association of American Medical Colleges sponsored a test (known as the Moss Test) which was given at many pre-medical centers throughout the country. The test was made up and graded on a national basis. Such a test affords a measure for comparison of students from different colleges. During those years it was demonstrated that, on the whole, students who did well in the test proved to be better medical students than those with low scores. They had a better chance of completing the study of medicine and presumably would also bring a higher intelligence to the practice of medicine.

Beginning with 1946, the Moss Test was replaced with a more elaborate one known as the Medical College Admission Test. This test is planned by a committee of the Association of American Medical Colleges and at first was administered by the Graduate Record Examination Board and more recently by the Educational Testing Service, of Princeton, New Jersey. Constant study is being given by the committee in an effort to bring about continued improvement in the usefulness of the test.

The Medical College Admission Test is designed to measure certain of the characteristics which are believed to be desirable in medical students and future physicians. The test is given twice a year (May and November) at over three hundred centers. The test takes a full day, forenoon and afternoon. It includes four parts: Verbal Ability, Quantitative Ability, Understanding of Modern Society, and Knowledge of Premedical Sciences. These tests are used to measure the understanding of word meanings, and the ability to comprehend verbal material in scientific, social and humanistic fields. It also tests the ability to deal with quantitative concepts in a practical and abstract manner. It includes material on the understanding of current history, economics, political science and sociology, but it does not presuppose specific college courses in any of the fields covered. The part dealing with pre-medical sciences covers a wide sampling of concepts and problems in the basic college courses in biology, chemistry, and physics, but does not assume advanced or specialized knowledge in these sciences.

The tests are prepared by the Committee and the papers are scored mechanically at national headquarters. The scores are reported only to medical schools for use in selecting students. They are not released to the candidates or to any individual or organization. It is, however, considered legitimate, and indeed useful, for the officials of medical schools to tell the applicant his approximate standing on the test.

*From the School of Medicine, West Virginia University.

[1]Doctor Dodds has been Chairman of the Committee of Admissions and Secretary of the Faculty of the School of Medicine for many years. He has been connected with the school since 1918. He will retire on July 1, 1951.

[2]Doctor Van Liere is Dean of the School of Medicine. He has been connected with the school since 1921.

The scores do not measure the absolute attainment of an individual, but only his relative standing with reference to the total number of students taking this test. The point is of interest when it is realized that between 15,000 and 20,000 persons take the test each year. It gives to admission officers a measure which is nationwide, rather than merely within the particular college or few colleges from which the student has received credits.

In general, it may be said that medical schools make much use of the test scores in the selection of students. Of the 79 medical schools in the United States, 59 announce that they require the test. Nearly all the others recommend it. Some not now requiring it announce that they will require it in the future. Of the students admitted to medical schools in the fall of 1949 (the most recent available figures), 93 per cent had taken the Medical College Admission Test. This shows clearly the extent of its use.

Nearly all of the medical schools of state universities announce that they require the test. In the fall of 1949, 97 per cent of students entering these schools had taken it and in eleven schools, all entering students had taken the test. It is, perhaps, not surprising that state universities make much use of test scores in judging the qualifications of applicants. As a whole, the admission officers of state supported schools feel that it is necessary for them to use the greatest care in the choice of students in order that they may merit the confidence of citizens from whose taxes the schools derive their support. The admissions committee of such a school virtually lives in a glass house. It must at all times be in a defensible position. The duties of these admissions officers become especially difficult at times, because of the mistaken belief, honestly held by many applicants and their friends, that admission can be secured only through political or personal influence.

In this connection, we would like to point out that state medical schools are charged with the responsibility of maintaining good standards, including the wise selection of students. In this matter, our experience has been very gratifying. Although we frequently receive letters from state officials in behalf of applicants, we have had excellent support from these officials in exercising the responsibility entrusted to us in the choice of students according to our judgment of good educational standards. We, too, have at all times received excellent support from the president of the University and the members of the board of governors. Indeed, without their cooperation we could not have carried on.

We have no detailed information as to the exact manner in which the various schools make use of the scores in the Medical College Admission Test, or of how great weight is given to the scores in relation to grades and other qualifications. But from personal contacts with admission officers in other schools we do know that there is considerable variation in the emphasis that is placed upon the scores. We know that practically all schools find them useful. Applicants with scores between 75 and 100 (the upper one-fourth of those who take the test) are nearly always found to be safe risks, whereas those at the other extreme, the lower fourth (scores of 0 to 25) are usually found to be unsatisfactory students even if admitted. Some schools do not consider applicants in this group at all.

In using the scores, committees on admissions find that for the majority of applicants the scores and the pre-medical grades fall in the same general range of excellence. Such agreement gives greater assurance in the decision for acceptance or rejection. When grades and test scores are of widely diverse rank, as is less frequently the case, the decision becomes more difficult and requires careful study. In cases where the general qualifications are of border-line quality, the test score is of considerable importance and may become the deciding factor.

From the point of view of the student who wishes to study medicine, it is of utmost importance that he take the test. His chances of admission without it are very small. Moreover, students who do poorly in this test would be taking great risk in entering medical school; especially so if their scholarship is of low excellence. Such students should at once make other plans rather than pursue the forlorn hope of admission to some medical school.

From the point of view of the school and the medical profession, the test may be looked upon as an added means for judging the qualifications of applicants so that a better class of students may be admitted. This would enable the facilities of the school to be used to greater advantage with a higher percentage of completion of the course. Thus more physicians could be produced, a goal which at the present time is very much to be desired.

In conclusion, the Medical School of West Virginia University has made use of the test scores for over 15 years as one of the items used in judging the fitness of applicants for admission, although it may be said that our use of the scores has leaned toward the conservative side. We have made frequent analyses of the records of our

students while in the Medical School and have thus learned that the use of the test scores has enabled us to make a better choice of students than would have been possible without them. Of course, in spite of the greatest care, some poorly qualified students have been admitted.

The personal and scholastic qualifications which determine success or failure are exceedingly complex and some of them are unpredictable. No system has yet been devised which will cover all contingencies. We hope that the general use of the test will be continued and that its usefulness will increase as experience accumulates. We believe the general results justify the necessary financial outlay, for it must be remembered that even though applicants pay fees for the privilege of taking the test, the Association of American Medical Colleges each year appropriates several thousand dollars to carry on the necessary activities connected with giving the test and distributing the results.

THE CLIMACTERIUM

Some of the secondary changes in sex characteristics which accompany the climacteric can be converted into assets with the complimentary attention of the physician to becoming gray or white hair. Prescription of a weight-limiting diet and mild conditioning exercises to mitigate the tendency to obesity characteristic of this epoch may temper this natural narcissistic insult.

When an underlying psychoneurotic or psychotic personality structure cannot bear the added burden of the psychosomatic adjustment required by the climacterium, then the assistance of one specially trained to handle psychiatric problems should be enlisted. Generally in the presence of severe anxiety states, hysteria, and melancholia, the services of a psychiatrist are required for more intensive and extensive forms of management. For anxiety states and hysteria, psychotherapy offers a favorable prognosis, as does psychotherapy combined with electro-shock for melancholic, depressive and suicidal states.

It must be emphasized that the climacterium does not, in itself, produce the psychiatric entity but merely may precipitate its frank clinical appearance because the defenses against its emergence, heretofore reasonably successful, cannot withstand the added assault of the new adjustment required of the woman in the climacteric.—Matthew Ross, M. D., in California Medicine.

PATCHING IN TIME

A little patching can be done and vicious cycles of insidious erosion at the foundations of our elderly patients may be broken—and so the house stands for a little longer. This we can do for our old people.—J. F. in Ohio St. Med. Journal.

Flattery never hurts a man unless he inhales.—Anon.

CHYLOUS ASCITES

(Report of a Case)

By RAY E. BURGER, M. D.,
Welch, W. Va.

The finding of chylous fluid in the abdominal cavity is a rare phenomenon. Prior to 1850, only about 25 cases of milky peritoneal effusions were recorded. In the succeeding sixty years Waller and Scholberg[1] collected 173 cases. Pratt and McCready[3] were able to find only 10 cases reported in English literature in the last 15 years. Yater[5] found the condition present in one-half the cases of chylothorax.

The condition may be traumatic, nontraumatic or spontaneous, and results from a rupture or obstruction of the thoracic duct system. Nontraumatic causes are malignancy, tuberculosis, mesenteric adenitis, adhesions and venous occlusion in the neck. Levering,[2] in 1943 pointed out the rarity of traumatic chylous ascites (6 reported cases). He noted also that trauma had occurred several weeks before the onset of ascites in several cases.

A gross diagnosis is made on the basis of milky peritoneal fluid. Microscopically, large fat globules are found, and these stain with Sudan III.

CASE REPORT

B. L., a 22 year old white male, was admitted to the hospital on December 27, 1949, complaining of gas, fullness, midabdominal pain and nausea of fourteen hours' duration. There had been no vomiting, no bowel nor urinary symptoms. He gave a history of his wife accidentally kicking him in the abdomen several days previously but had not attached any significance to this relatively minor injury.

Examination revealed moderate tenderness in the periumbilical area and slight rebound tenderness; there was no spasm nor mass present. Rectal examination was negative. Chest and heart examination negative. Blood pressure 130/80. The remainder of the examination was negative. Temperature 99 F. Pulse 80. WBC 12,400. Urine negative. Developing appendicitis was considered and the patient was observed overnight.

The following morning the patient continued to complain of the same symptoms, and examination revealed slightly more distention and more tenderness on the right side. Temperature was 98.6 F., pulse 84, WBC 10,950. We then decided on an appendectomy. The patient was given spinal anesthesia and a McBurney incision made. On opening the peritoneum, there was a gush of milky fluid which had the appearance of homo-

genized milk. It was estimated that between 5 and 6 liters of the chylous fluid were aspirated. After the major portion of the milky fluid was removed, a considerable portion of the small intestine and cecum was inspected and in most areas the chyle extended retroperitoneally and had dissected and infiltrated between the sheaths of the mesentery. No break nor tear in any of the structures was visible. Routine appendectomy with inversion of the stump of a normal appearing appendix was carried out, and the incision closed. Examination of the fluid revealed large fat globules with occasional pus and red blood cells. No organisms were found on smear or culture. Mazzini was negative. His postoperative course was normal and he left the hospital on the fifth postoperative day. He was discharged for desk work January 9, 1950.

Haynes[1] reported a similar case in 1948 which he thought was of spontaneous unknown origin. His case had complete recovery after exploration and drainage. Prognosis in this condition depends upon the severity of the underlying cause.

SUMMARY

A case of chylous ascites of traumatic or spontaneous origin with prompt recovery has been reported.

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DO NOT IGNORE MAIN STREET

The little man on Main Street knows the promise modern medicine holds for him, and he has demanded a part of it, a demand which a few would use to increase the power of our already cumbersome and too expensive bureaucracy.

We should grant that all the right may not be on our side and we cannot and should not ignore what Main Street needs and wants. We should recognize the inevitability of changes in customs and practices in all walks of life, ours along with the others. There are many who would give up and let anyone reorganize the profession any way he likes, but if we listen to them we have lost our right to a voice and we are no longer free.—C. Edgar Virden, M. D., in J. Missouri St. Med. Assn.

CHRONIC ALCOHOLISM AND SOCIAL DRINKING

Chronic alcoholism does not depend on alcohol consumption as such but on its relationship to individual susceptibility. There is no indication that one deals with an addiction as addiction is usually defined, because tolerance and definite withdrawal symptoms do not develop. Acute intoxication and the individual's reaction to it do not give us the picture of chronic alcoholism although they occur in this setting but also without it.

It is important that we try to distinguish the chronic alcoholic from the excessive and the heavy social drinker. An excessive drinker is an individual who uses alcohol frequently and in large quantities and may even behave pathologically when under the influence of alcohol. He is, however, capable of overcoming the habit when he becomes aware of the necessity for it.

A heavy social drinker drinks heavily during social occasions, with frequent or even regular intoxication, but the drinking does not present a serious handicap. The excessive and the heavy social drinker are amenable to medical advice if they can recognize its importance. There is no special psychotherapy necessary to have such a patient change his mode of living if one can present sound arguments to him. If he is unable to accept or to follow through the necessary consequences, then, by definition, he must be considered a chronic alcoholic and be treated as such.—Oskar Diethelm, M. D., in Bulletin, N. Y. Acad. Med.

PSYCHIC TRAUMA

Psychic trauma occurs in the frictions of our everyday life, in such guise as hurry, worry, and fear. In my book, psychic trauma is the direct and underlying cause of chronic fatigue. Physical trauma also leads to fatigue but not in the same degree nor with the numbing deadliness of psychic trauma. When we are "dead tired" and "can't think straight," we are talking of the kind of fatigue that arises from emotional struggles and conflict. We recover relatively quickly from the effects of physical fatigue but not so from emotional or psychic exhaustion.

Fatigue then is the baby I'm gunning for, because I believe it is one of the most active and potent forces in all chronic diseases and in many acute ones. Fatigue spreads a poisonous toxin that interferes with bodily functions, both physical and psychological. It is a basic factor in arthritis, in peptic ulcer and ulcerative colitis, in hyperthyroidism, in the common cold, and in many of the neuroses and even in some of the psychoses. It seems to me that fatigue deserves more emphasis in this study of premature aging.

My idea, therefore, is to continue to follow the anatomical and physiological changes that are associated with the aging process, such as arteriosclerosis, and the measurable metabolic disturbances, such as cholesterol aberrations, but to pursue at the same time with relatively greater vigor and interest this problem of fatigue. For I believe that the investigation of the physical changes alone lead up a blind alley to a stone wall, and that the problem will not be understood until the more potent factor of psychic trauma is carefully studied and evaluated.—Wm. M. Ballinger, M. D., in Medical Annals of the District of Columbia.

The President's Page

The House of Delegates of the West Virginia State Medical Association will meet in annual session, July 19-20, 1951, in connection with the State Meeting at White Sulphur Springs. This body is the governing body of the Association. It consists of representatives from each component society.

Most all of the societies will have another meeting before then, so if there is anything you think the Association should do or discontinue doing, the matter should be brought up before your constituent society in order that your delegates may receive proper instructions.

The meetings of the House of Delegates are not "cut and dried" and there will be no fancy parliamentary procedures to circumvent the will of the majority of the delegates. It is the duty and the obligation of the delegates to present the views of the members of their constituent societies.

The following are some of the really big problems which I hope will be discussed by component societies and delegates before the annual meeting in July:

1. The letter addressed to members by the West Virginia Medical Society;
2. Operation of the United Mine Workers Welfare Fund;
3. The Veterans Administration home-town medical care program;
4. Our public relations program;
5. The Osteopathic problem;
6. The compensation fund fee schedule;
7. Hospital relations, especially the closed staff problem;
8. Revision of our coroner statute;
9. Blue Cross and Blue Shield problems; and
10. Establishment of permanent quarters for the State Medical Association.

Please think all these matters over carefully and give your society and delegates the benefit of your views so they may be discussed in detail by the House of Delegates.

Frank G. Salvaggio

President.

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JAMES RAMSDELL BLOSS

As we travel along life's journey, but few of the individuals with whom we come in contact leave any material impression upon us. But there are those who stand out above the common herd of humanity and by their ability, their character and their dynamic personality guide the thinking not only of their professional confreres but that of the entire communities in which they reside. Such a man was James R. Bloss.

Born in Ceredo, but reared in Huntington, all his active and constructive life was spent in that city. His early education was directed toward the Christian ministry but, impressed by the death of his own mother, a death he felt not only preventable but needless, he decided to enter medicine and devote his life to lessening the dangers and trials which beset pregnancy and parturition. He probably never invoked the blessing of Lucina, but he daily went about his work mitigating the pains and dangers of travail and the sequelae which so often lurk in its wake. So great was his success in the special field of obstetrics and gynecology that his reputation was not only national but international.

In addition to his work in his professional practice, Doctor Bloss was a human dynamo in the field of medical organization at county, state and national levels. At one time or another he held every office in the county society and most of them in the state association. For years he was editor of the Journal and was editor emeritus after his active tenure of the editorship. For years a member of the House of Delegates of the American Medical Association and later for a decade a member of its Board of Trustees, he influenced strongly medical policies and medical thinking at the national level.

Doctor Bloss set up for himself certain principles to serve as guideposts for his personal and professional life, among which were: belief in a Supreme Ruler of the universe; the Golden Rule; loyalty to medicine and its ideals; loyalty to his patients and his friends; good medical service at a price the patient could afford to pay; democracy and private enterprise; and endless warfare against all efforts to shackle America with socialism and convert this country into a socialist state. Medicine in West Virginia is better, and West Virginia as a state and a place in which to live and move and have our being is likewise better for the life and work of James R. Bloss. Thirty five years of close association and personal friendship with him convinces us that we may justly quote the Bard of Avon and say:

His life was gentle, and the elements
So mixed in him, that Nature might stand up
And say to all the world, "This was a man!"

MEDICAL COLLEGE ADMISSION TEST

The selection of medical students, our future doctors, has, of late years, become of increasing interest. Even the laymen appreciate the difficulty some students have of gaining acceptance into a medical school. Because of the limited facilities of medical schools, a goodly number of applicants, many of whom are reasonably well qualified, cannot be given the opportunity of enrolling in the medical curriculum. The selection of medical students places, therefore, a grave responsibility on the Committees of Admissions.

Elsewhere in this issue of the *JOURNAL* may be found an article which concerns the use of the Medical College Admission Test in the selection of medical students. This article is timely, for often the unsuccessful applicant hears vague rumors that he did not do well on the test. Indeed, his relatives, friends and well-wishers, too, have heard about this. There has been considerable misunderstanding about the test. Some no doubt feel that the use of it is a covert way of keeping students out of medical schools and that the entire matter is shrouded in mystery

and kept that way purposely. This is, of course, not true. Educational institutions worthy of the name do not lend themselves to trickery.

There are no secrets about the Medical College Admission Test. While the results of the test are given out only to institutions, medical school authorities are permitted to inform the applicant or his parents his approximate standing. It is not in the province of this editorial, however, to debate the matter as to how much publicity should be given the results of this test.

Medical educators are frank to admit that the results of the test often do not show as high a correlation with the pre-medical grades as might be desired or predict how well the student will do in his medical studies. Despite this, the test has been and is useful. It is to be hoped that as time goes on it will become increasingly more so.

Finally, it is granted also that there is as yet no measure devised which will predict how successful the medical student will be in his practice or how much he will contribute either to the practice or the art of medicine. There are certain intangibles which at present are inscrutable and may always be so. Be that as it may, encouragement should be given to any helpful and intelligent method which will aid in the selection of medical students who have good prospects of completing the curriculum.

Medical educators are charged with the enormous responsibility of selecting students who in their judgment will not only be a credit to the profession, but who will actually aid in elevating the excellence of the art and practice of medicine. This charge should be accepted in a humble albeit willing mood.

ODDS FAVOR WIFE SURVIVAL OVER HUSBAND

The average wife in our country can look forward to many years of married life (barring divorce). As an illustration let us take the case of a woman 25 years of age who marries a man of 30.

According to the mortality of the white population in 1948, the expectation of life is 40 years for the husband and 49 years for the wife. Their joint expectation of life is 36 years. That is substantially greater than the expected joint lifetime at the turn of the century.

In 1900 the average marriage at these ages would have endured only 28 years before one of the spouses died. When a marriage is dissolved by death, it is the wife who is likely to survive; currently the odds are two to one that the wife will outlive her husband. —Statistical Bulletin, Metropolitan Life Insurance Co.

A mouse will always find free cheese in a mousetrap, but I never saw one that was happy about it. —Anon

GENERAL NEWS

PROGRAM FOR ANNUAL MEETING AT THE GREENBRIER NEARS COMPLETION

The scientific program for the 84th annual meeting of the West Virginia State Medical Association will probably be completed by the time this issue of the Journal is in the mails. The program committee has worked hard to arrange a program of exceptional merit, and guest speakers who have already accepted invitations are doctors outstanding in their particular specialty fields.

ROOMS STILL AVAILABLE

Desirable rooms are still available at the Greenbrier. Applications for reservations should be filed directly with the hotel management at White Sulphur Springs. Reservation must be made prior to July 1, at which time the rooms with accommodations for 650 guests, set aside for the use of doctors, their wifes, and guests, which have not been reserved will have to be released to the management for the use of other guests.

First General Session

The first scientific session will be called to order by Dr. Frank J. Holroyd, the president, Thursday morning, July 19, and Dr. Arnold S. Jackson, director of the Jackson Clinic, of Madison, Wisconsin, and associate editor of the American Journal of Surgery, will be the first speaker. His subject will be "Cysts and Tumors of the Neck."

The other two speakers at the Thursday morning meeting will be Dr. George E. Burch, of Tulane University, New Orleans, who will discuss "Certain Aspects of Water and Electrolyte Balance," and Dr. Ralph M. Tovell, chief of the department of anesthesiology at Hartford Hospital, Hartford, Connecticut, who will speak on the subject of "Vasoconstrictors and Spinal Anesthesia."

Second Day's Program

Three speakers have already accepted invitations for the second general session on Friday, July 20. The following is part of the program arranged for that day:

"Diagnosis and Treatment of Diabetic Acidosis"—A. R. Colwell, M. D., Northwestern University Medical School, Chicago.

"The Relation of Life Stress to Organic Disease"—Stewart Wolf, Jr., M. D., Cornell University Medical College, New York City.

"The Role of the Practitioner in the Management of Asthma"—Oscar Swineford, Jr., M. D., University of Virginia School of Medicine, Charlottesville.

Final Session

The program for Saturday, July 21, has been completed. Scientific papers will be presented as follows:

"Infections of the Genito-Urinary Tract"—John A. Campbell Colston, M. D., Johns Hopkins Hospital, Baltimore.

"Common Orthopedic Problems Which Can Be Managed in the Office of the General Practitioner"—H. R. McCarroll, M. D., St. Louis.

"The Problem of Primary Dysmenorrhea"—Emil Novak, M. D., Baltimore.

Dr. Frank E. Adair, associate professor of clinical surgery at Cornell University Medical College, New York City, will be the last speaker on the program Saturday morning. His subject will be announced in the July issue of the Journal.

Presidential Address Thursday Evening

Dr. Frank J. Holroyd will deliver the annual address of the president Thursday evening, July 19, and Mrs. Ross P. Daniel, of Beckley, state president of the Woman's Auxiliary, will also be a guest speaker on this program.

AMA President on Program

Dr. John P. Cline, of San Francisco, who will be installed as president of the American Medical Association at the annual meeting at Atlantic City in June, will address an open meeting on Friday evening, July 20.

Annual Banquet Saturday Evening

The annual banquet is scheduled for seven o'clock Saturday evening, and the program committee is making every effort to book an outstanding entertainment feature. The Weirton Male Chorus made a decided hit at the banquet in 1950.

Section and Society Meetings

Section and society meetings are being set up for each afternoon during the convention. On the first day, the Section on Surgery will have Dr. Arnold S. Jackson, of Madison, Wisconsin, as the guest speaker; the West Virginia Heart Association, Dr. George E. Burch, of New Orleans; and the West Virginia Society of Anesthesiology, Dr. Ralph M. Tovell, of Hartford, Connecticut. Each of the section meetings are scheduled to open at two o'clock.

A joint meeting of the West Virginia Academy of General Practice and the Section on Pediatrics will be held Thursday afternoon, and the guest speaker will be Dr. Alexis F. Hartmann, professor of pediatrics at Washington University School of Medicine, St. Louis. His subject will be "Recognition and Management of Serious Disturbances in Acid Base Balance."

Another important joint meeting is scheduled for Friday afternoon at two o'clock. This meeting will be sponsored by the Section on Internal Medicine, the West Virginia Chapter of the American College of Physicians, and the West Virginia Diabetes Association. Dr. A. R. Colwell, of Chicago, and Dr. Stewart Wolf, Jr., of New York City, will be among the guest speakers.

The West Virginia Academy of Ophthalmology and Otolaryngology will also meet at two o'clock, with Dr. Oscar Swineford, Jr., of Charlottesville, as the guest speaker.

Saturday section and society meetings have been scheduled with guest speakers as follows: Section on Urology, John A. Campbell Colston, M. D., of Baltimore; Section on Orthopedic Surgery, A. R. McCarroll, M. D., of St. Louis; West Virginia Obstetrical and Gynecological Society, Emil Novak, M. D., of Baltimore; and the Cancer Committee, Frank E. Adair, M. D., of New York City.

House of Delegates

The first session of the House of Delegates will be held Thursday afternoon in the auditorium at the Greenbrier. The second session is scheduled for Friday afternoon, July 20.

No Registration Fee

As previously announced by the State Medical Association, there will be no registration fee for doctors attending the annual meeting this year.

Golf and Tennis Tournaments

The usual golf and tennis tournaments are being arranged, and the respective committees have already received several valuable prizes which will be awarded successful participants. The first leg on the new championship golf trophy, offered by the Kloman Instrument Company of Charleston, was won last year by Dr. Charles E. Watkins, of Oak Hill, then president of the State Medical Association.

ACS IN SAN FRANCISCO

The 37th annual clinical conference of the American College of Surgeons will be held in San Francisco, November 5-9, 1951. Headquarters will be maintained at the Fairmont Hotel and Civic Auditorium. The 30th annual Hospital Standardization Conference will be held conjointly with the meeting, and the combined programs will include scientific sessions, panel discussions, conferences, symposia, and forums.

Dr. Alton Ochsner, of New Orleans, will be installed as president at the meeting, succeeding Dr. Henry W. Cave, of New York City. Dr. Arthur W. Allen, of Boston, is chairman of the board of regents of the college, and Dr. Paul R. Hawley, of Chicago, is director.

Full information concerning the program may be obtained from Mr. L. G. Jackson, Director, Public Relations, 40 E. Erie Street, Chicago 11, Illinois.

HEART GROUP AWARDS RESEARCH GRANT

A grant of $3,000.00 for research in heart disease has been awarded the School of Medicine at West Virginia University by the board of directors of the West Virginia Heart Association.

The board has also granted a fellowship award of $2500.00 to the American Heart Association with the stipulation that citizens of West Virginia be given preference in using the proceeds of the award.

It has been announced that a total of more than $25,000.00 was collected in West Virginia during the 1951 Heart Fund Drive, an increase of $6,000.00 over 1950.

The North Portico of The Greenbrier, West Virginia's world-renowned resort at White Sulphur Springs

The Luxurious Pool at the Greenbrier in White Sulphur Springs

B-R-T SPONSORING SECOND ANNUAL PG COURSE AT ELKINS, JUNE 21

The second annual postgraduate session of the Barbour-Randolph-Tucker Medical Society will be held at the Tygart Valley Country Club near Elkins, Thursday afternoon, June 21, with Dr. Charles L. Leonard serving as moderator. The following scientific program will be presented, beginning at two o'clock:

"The Treatment of Common Respiratory Disorders" —Samuel P. Martin, M. D., Department of Medicine, Duke University, Durham, North Carolina.

"Anion Exchange Resins; A New Concept in the Treatment of Edema"—B. L. Martz, M. D., Lilly Laboratory for Clinical Research, Indianapolis, Indiana.

"Bronchiogenic Carcinoma"—Brian Blades, M. D., Professor of Surgery, George Washington University, Washington, D. C.

Dr. D. A. MacGregor, of Wheeling, will be toastmaster at the annual banquet in the evening, and the guest speaker will be Lt. Col. Colin F. Vorder Bruegge (MC), USA, Institute of Pathology, Washington, D. C.

On behalf of the B-R-T Society, Dr. Semon Lilienfeld, the president, and Dr. Donald R. Roberts, the secretary, have extended a general invitation to the members of the West Virginia State Medical Association to attend the meeting, and it has been pointed out that banquet reservations should be made in advance.

Dr. Herman Seltz, of Elkins, is chairman of the golf committee, and doctors who play golf are asked to register at the caddy house as early in the morning as is possible.

DOCTOR PRICKETT HEADS PH ASSOCIATION

Dr. David C. Prickett, of Weston, was elected president of the West Virginia Public Health Association at the annual meeting held in Huntington, May 3-5, 1951. Doctor Prickett is health officer for District No. 4. Other officers were named as follows:

First vice president, Donald Lough, Williamson; second vice president, Azel McCurdy, Huntington; and treasurer, Mrs. Katherine Jones, Charleston. Dr. Thomas C. Sims, of Huntington, Mr. Thomas Deveny, Jr., of Charleston, and Mrs. Alice Vanlandingham, of Morgantown, were named delegates-at-large. Mrs. L. C. Fisher, of Charleston, was elected representative to the American Public Health Association.

The meeting was attended by over 400 health officers, nurses and other public health personnel, with an unusually large number of physicians present at the scientific sessions.

JUNIOR ACADEMY OF SCIENCE AWARD

The award of $10.00 offered by the West Virginia State Medical Association for the best paper submitted on a medical subject by a member of the Junior Academy of Science has been won by Mr. Richard Farrish, student at Marshall High School, Huntington. The title of his paper that was adjudged the best submitted was "The Adrenal in Health and Disease."

PROPOSED AMENDMENTS TO THE CONSTITUTION

The following amendments to the Constitution of the West Virginia State Medical Association offered by the Committee on Revision of Constitution and By-Laws at the annual meeting of the House of Delegates at White Sulphur Springs, July 27-29, 1950, will be submitted to the House for final action at the 84th annual meeting at White Sulphur Springs, July 19-21, 1951:

Article IV

Sec. 2. Amend the section to read as follows:

"MEMBERS. Membership in this Association shall be limited to doctors of medicine licensed to practice in West Virginia who are members of a component medical society of the West Virginia State Medical Association."

(This Section now reads as follows: "MEMBERS. The members of this Association shall be the members of the component county medical societies.")

Article XI

Sec. 1. Amend the section to read as follows:

"Funds shall be raised by an annual per capita assessment of dues against members of the Association. Dues in the amount of $25 per annum shall be paid by each such member in the manner provided by the By-Laws."

(This Section now reads as follows: "Funds shall be raised by an annual per capita assessment of dues against members of the Association. Dues in the amount of $15 shall be paid by each such member in the manner provided by the By-Laws.")

PG COURSE IN GASTROENTEROLOGY

A postgraduate course in gastroenterology is scheduled for the Drake Hotel, in Chicago, Illinois, September 20-22, 1951, under the auspices of the National Gastroenterological Association. For the second consecutive year, the course will be under the direction and co-chairmanship of Dr. Owen H. Wangensteen, professor of surgery of the University of Minnesota Medical School, and Dr. I. Snapper, director of medical education of the Mt. Sinai Hospital, New York City, who will serve as medical coordinator.

Full information and enrollment blanks may be obtained by writing to the National Gastroenterological Association, Department GSJ, 1819 Broadway, New York 23, New York.

DR. J. S. KESSEL IN GERMANY

Dr. James S. Kessel, of Ripley, has been called to active service in the Army and is now stationed somewhere in Germany.

RELOCATIONS

Dr. Robert L. Calvert, formerly of Charleston, has located at Amigo, in Raleigh county, where he will continue in general practice.

* * * *

Dr. John S. Guerrant, of Beards Fork, has moved to Madison where he will continue in general practice as a member of the staff at the Glover Clinic.

* * * *

Dr. Max Harris, of Elkins, has moved to Pursglove. where he will continue in general practice.

NEW LILLY BLOOD-PROCESSING UNIT

Eli Lilly and Company has announced plans to establish a modern blood-processing unit. The new unit, which is being planned because stock-piling of human blood plasma for military or civilian disaster is considered an essential defense measure, will be operated in Indianapolis for the Armed Services Medical Procurement Agency of the United States, and will be completed late this year.

During World War II, over 2,000,000 pints of blood were processed and supplied at cost by the Lilly Company.

MEDICAL GOLF TOURNAMENT IN JULY

Many valuable prizes offered by various drug and accessory houses will be awarded by the Golf Tournament Committee at the 84th annual meeting of the West Virginia State Medical Association, at White Sulphur Springs, July 19-21.

The grand championship trophy, offered by Kloman Instrument Company, of Charleston, was permanently retired by Dr. Charles E. Watkins, of Oak Hill, at the annual meeting in 1949. The first leg on the second championship trophy, also offered by the Kloman Company, was won last year by Doctor Watkins. This trophy is retired by the member who wins the championship on three separate years.

Valuable prizes are being offered this year by Van Pelt & Brown, Richmond, Max Wocher and Son Company, Cincinnati, Wyeth, Inc., Philadelphia, Powers and Anderson, Richmond, and others.

Play will be limited to afternoons on July 19-20-21, with play on course No. 1 or course No. 3. Participants must notify starter when play has begun, and play must be in threesomes or foursomes. Each participant will keep his own score and count all putts.

It will not be necessary for participants to furnish handicap rating. The golf committee, which will have charge of the tournament, is composed of Dr. James S. Klumpp, of Huntington, chairman, and Drs. R. R. Summers, of Charleston, and J. I. Markell, of Princeton.

INT. ACAD. OF PROCTOLOGY

The 3rd annual convention of the International Academy of Proctology will be held at the Mayflower, in Atlantic City, June 7-8, 1951. The scientific sessions will feature the more recent developments in proctology. The sessions will be open to all members of the medical profession.

DR. A. C. CHANDLER NAMED PRESIDENT OF W. VA. ACADEMY OF OPH. AND OTOL.

Dr. A. C. Chandler, of Charleston, was named president of the West Virginia Academy of Ophthalmology and Otolaryngology at the annual spring meeting held April 27-28, 1951, at the Greenbrier, in White Sulphur Springs.

Dr. M. H. McGehee, of Huntington, was named president elect, Dr. J. K. Stewart, of Wheeling, second vice president, and Dr. Keith E. Gerchow, of Morgantown, treasurer. Dr. Ben W. Bird, Jr., of Princeton, was reelected secretary, and Dr. Ralph S. McLaughlin, of Charleston, was elected councillor to succeed Dr. Ivan Fawcett, of Wheeling. Dr. John H. Trotter, of Morgantown, is a hold-over councillor.

The following resolution was adopted at the business session held in connection with the meeting:

> "Whereas, the present fee schedule of the Compensation Commission was set up many years ago; and,
>
> "Whereas, the expense involved in practicing medicine and the cost of living has been advancing steadily since that time; and,
>
> "Whereas, there are many inequities in the present fee schedule, and,
>
> "Whereas, the fees granted by other state compensation commissions in states surrounding us are more equitable than those in West Virginia,
>
> "Now, Therefore, Be It Resolved: That the Council of the West Virginia State Medical Association appoint a committee with representation from each group of the Association to confer with the Commissioner of the West Virginia State Compensation Commission concerning the subject of an adequate adjustment of medical and surgical fees to be more in accord with the present economic situation."

The summer meeting of the Academy will be held during the annual meeting of the West Virginia State Medical Association at White Sulphur Springs, July 19-21, 1951.

JOE SAVAGE WITH KING FEATURES, INC.

Mr. Joe W. Savage, former executive secretary of the West Virginia State Medical Association, has resigned as executive director of the National Foundation for Infantile Paralysis to accept appointment as an associate editor with King Features in New York City. He entered upon his new duties May 15. His successor is Raymond H. Barrows, of San Francisco, who has been vice president and manager of the Pacific area of the American Red Cross.

Joe Savage has been executive director of the National Foundation since shortly after his honorable discharge from military service during World War II. Previously, he had served as executive secretary of the State Medical Association for over 15 years.

During World War I, he served overseas as a pursuit pilot, and was commandant of cadets at Hondo and San Marcos Army Air Fields near San Antonio, Texas, during World War II.

Mr. Savage, who has been residing at Palisades, will move with his family to Piermont, New York, the first of June.

SOUTHERN MEDICAL TO INSTALL DR. R. J. WILKINSON AS PRESIDENT

The 45th annual meeting of the Southern Medical Association will be held November 5-8, 1951, in Dallas, Texas.

The program, set up in accordance with the directives of the executive committee of the Council, provides for forty-seven half-day sessions. Contrary to the usual custom, there will be no general sessions at the Dallas meetings; instead, all available time will be allotted to the twenty-one sections for their programs.

The annual dinner is scheduled for Wednesday evening, November 7, and alumni and specialty dinners will be arranged for Monday and Tuesday evenings.

Dr. R. J. Wilkinson, of Huntington, is the president elect of Southern Medical Association, and will be installed at the Dallas meeting. He will succeed Dr. Curtice Rosser, of Dallas.

Dr. Andrew E. Amick, of Lewisburg, is a member of the Council, and Dr. J. J. Brandabur, of Huntington, is secretary of the section on industrial medicine and surgery.

Dr. Howard A. Swart, of Charleston, is chairman of the section on orthopedic and traumatic surgery and will be in charge of the section meeting at Dallas. Dr. N. H. Dyer, of Charleston, state director of health, is vice chairman of the section on public health.

LAST CALL FOR REGISTRATION

Several hundred doctors practicing in West Virginia have already filed applications for reregistration with the state health department. The deadline is July 1, 1951, the end of the present biennium. The registration fee is $2.00 and application forms have been mailed to the last known address of every doctor in West Virginia. The registration is for the new biennium ending July 30, 1953.

The medical licensing board has adopted the policy of waiving the payment of the fee by doctors who have retired from active practice; however, according to Dr. N. H. Dyer, secretary of the board, it is necessary that such doctors return the application form marked to show that they have retired.

Out-of-state doctors who desire to keep alive their license to practice in West Virginia are required to pay the registration fee.

This registration will be the second under the provisions of the reregistration law passed by the legislature in 1949.

MLB SCHEDULES SUMMER MEETING

The summer meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, July 9-11, 1951, for the purpose of examining applicants for licensure to practice medicine in West Virginia.

NARCOTIC LICENSE RENEWAL

Applications for renewal of narcotic license for the year ending June 30, 1952, must be returned to the Collector of Internal Revenue on or before July 1, 1951.

AED SILVER ANNIVERSARY

The silver anniversary of Alpha Epsilon Delta, national premedical honor society, was recently celebrated at a meeting held at the University of Alabama. This meeting was probably the most outstanding in the history of the society. Features included a memorial service and the fourth regional conference on premedical education.

The principal speaker at the memorial service was Dr. Marsh W. White, of Pennsylvania State College, past president of the Association of College Honor Societies. His subject was "The Place of the Honor Society in the University." He outlined some problems and opportunities facing the honor societies in contributing to the educational program of the university.

Dr. Hugh E. Setterfield, of Ohio State University, is the national president of the Alpha Epsilon Delta, and Dr. Maurice L. Moore, is national secretary. Headquarters offices are maintained at 37 Whitemarsh Road, Ardmore, Pa.

West Virginia had six representatives and faculty members at the convention from chapters at West Virginia University and Marshall College.

GREENBRIER VALLEY AUXILIARY ORGANIZED

A new chapter of the Woman's Auxiliary to the West Virginia State Medical Association, the Auxiliary to the Greenbrier Valley Medical Society, has been organized by Mrs. Frank J. Holroyd and Mrs. Ben W. Bird, Jr., both of Princeton. Mrs. Holroyd is third vice president of the State Auxiliary and Mrs. Bird is PR chairman.

Mrs. George L. Lemon, of Lewisburg, was elected president, Mrs. H. D. Gunning, Ronceverte, vice president, Mrs. H. B. Strader, White Sulphur Springs, secretary, and Mrs. R. F. Hawkins, Lewisburg, treasurer.

Mrs. James P. Baker was hostess at the first meeting, which was held at her home in White Sulphur Springs. The organization meeting was attended by 14 charter members.

MRS. HOLCOMBE TO HEAD SOUTHERN MEDICAL

Mrs. V. Eugene Holcombe, of Charleston, will be installed as president of the Women's Auxiliary to the Southern Medical Association at the annual meeting in Dallas, Texas, November 5-8, 1951. Only one other member of the West Virginia Auxiliary has ever served as president of the Southern Medical group. Mrs. John P. Helmick, of Fairmont, held that office a few years ago.

Mrs. Holcombe is a past president of the West Virginia Auxiliary and is also a past president of the Woman's Auxiliary to the American Medical Association.

PRE-CONVENTION MEETING OF COUNCIL

The regular pre-convention meeting of the Council will be held at The Greenbrier, in White Sulphur Springs, Wednesday afternoon, July 18, at four o'clock, with Dr. Charles E. Watkins, of Oak Hill, presiding as chairman.

THE WEST VIRGINIA MEDICAL JOURNAL

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Vol. XLVII JULY, 1951 No. 7

THE PAPANICOLAOU SMEAR: AN INTEGRAL PART OF THE ROUTINE PELVIC EXAMINATION

By WILLIAM R. LAIRD, M. D.,
Laird Memorial Hospital
Montgomery, W. Va.

Next to carcinoma of the breast, carcinoma of the uterus is the most common malignant lesion in women. It causes approximately 20 per cent of all deaths from carcinoma and is found approximately four times as frequently in the cervix as it is in the fundus.[1]

Carcinoma of the cervix occurs in a younger age group. Nevertheless many patients with overt carcinoma in this area first present themselves for examination, because of relevant symptoms, in the period of the menopause.

As to the end results of treatment Nunnell and Brunschwig[2] reported results in 1072 cases treated at Memorial Hospital by radiation alone between 1934 and 1941. They concluded that there appeared to be little consistent amelioration in results of the management of carcinoma of the cervix during the years studied, the overall rate of apparent cure being 28.6 per cent.

Treatment generally has consisted of radiation either by x-ray, radon seeds or radium. However, there has been a constant difference of opinion concerning the efficacy of radiation over surgery. The continued assertion in standard textbooks that radical hysterectomy for carcinoma of the cervix is accompanied by a high mortality rate has been a strong deterrent to surgical attempts in this field. Meigs[1] and Brunschwig[2] have shown that modern surgery in selected patients should not entail significant mortality. Physicians are re-exploring, with encouraging results, the possibilities of surgery. Although the value of radiation has been proved it appears that there is a definite indication for radical surgery in the treatment of cervical carcinoma.

Therefore, the problem is not simply one of irradiation versus surgery but a matter of carrying out the most appropriate treatment at the earliest possible time.

The program of general education must, of course, be continued because still too often the patient presents herself for the first time, already with a far advanced, hopelessly incurable lesion. On the other hand, the members of the medical profession must be cautioned repeatedly to suspect the presence of this insidious condition. This is illustrated in a report by Meigs[1] in which it is stated that in one series of 1938 cases of carcinoma of the cervix supracervical hysterectomy had been performed in the presence of the carcinoma in 53 cases.

What more can be achieved in the way of earlier diagnosis? The concept of a preinvasive, noninfiltrating phase of carcinoma of the cervix has gained wider and well merited acceptance. In this phase adequate therapy should result in a high proportion of cures but, again in this phase, there are no leading symptoms. How, then, in such cases, can carcinoma be suspected and diagnosed? The lesion cannot be detected by physical examination. It can be missed easily on biopsy because of its limited extent and its frequent endocervical location. Therefore, the detection of carcinoma in this phase offers a real challenge to the physician.

The cervical smear according to the method of Papanicolaou[7,8] must be regarded as the best rou-

tine method so far devised of detecting neoplastic cells in cases of preinvasive carcinoma.

It has been shown[3,4] that the average age of patients with preinvasive carcinoma is 36.6 years, six years below the average age of patients with overt invasive carcinoma and twelve years below that of patients with overt carcinoma of the fundus.

Pund and Auerbach[3] reported that preinvasive carcinoma was found in 3.9 per cent of 1200 surgically removed cervices. In 1947 they reported seven additional cases detected by routine cervical smears and confirmed by biopsy and endocervical curettage.[6]

Of 24 patients with carcinoma *in situ* diagnosed in the Memorial Hospital Foote and Stewart[4] reported that 11 had no gynecologic complaints, 11 had some form of vaginal bleeding, and two complained only of leukorrhea. Examination of the cervices had revealed no unusual pathologic changes although erosion was described in 11 cases.

The general histopathology of tumors has led to the empirical knowledge that cancer cells frequently display certain morphologic features which distinguish them from their benign relatives. It was, however, an accepted opinion among pathologists that these characteristics were not reliable enough for the determination, in a given instance, of whether or not a single cell or group of cells should be regarded as malignant or benign. Careful and patient studies, together with an appropriate staining method, finally have enabled Papanicolaou and his co-workers to establish certain rules by which such cytologic discrimination has become practicable and reliable if judiciously applied by experienced examiners.

The more that is known about exfoliative cytology the more it must be stressed that correct interpretation depends on long practice and thorough training in pathologic histology. Such interpretation belongs entirely in the hands of a pathologist who, moreover, must be willing and able to spend much time in tedious observation in order to accomplish the most accurate results.

The method lends itself particularly well to the screening of cases and as such should be used widely in routine examination of patients with vague symptoms. In all cases in which the presence of a tumor is clinically obvious or highly suspicious, biopsy is and always has been the method of choice. Furthermore, it should be stressed that even in cases in which the diagnosis of a malignancy is made or suspected on the basis of smear examinations, final verification by biopsy should be attempted. This implies that the smear technic must be regarded for the time being as a valuable supplement but not an alternative to the classical biopsy method.

As a result of multiple serial sections through the cervices of their 24 reported cases of intraepithelial, epidermoid carcinoma, Foote and Stewart found that these *in situ* malignancies were concentrated in a critical area centering at and about the external os, more frequently on the

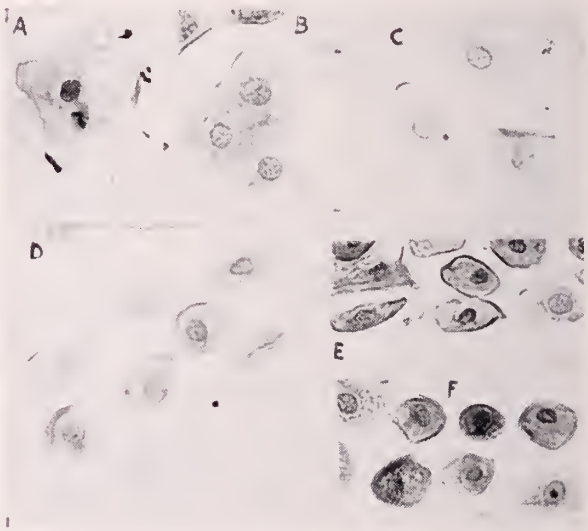

Fig. 1.—Papanicolaou smears.

Normal Cells I: A-F, cells from the vaginal mucosa: A and B, vaginal surface cells; C, smaller surface and intermediary cells; D, (oval or navicular) intermediary and (round) basal cells; E, navicular cells, as often seen in the postpartum period; F, basal cells. (The terms superficial, intermediary, and basal refer to the respective strata of the multilayered vaginal squamous cell epithelium from which these cells originate.)

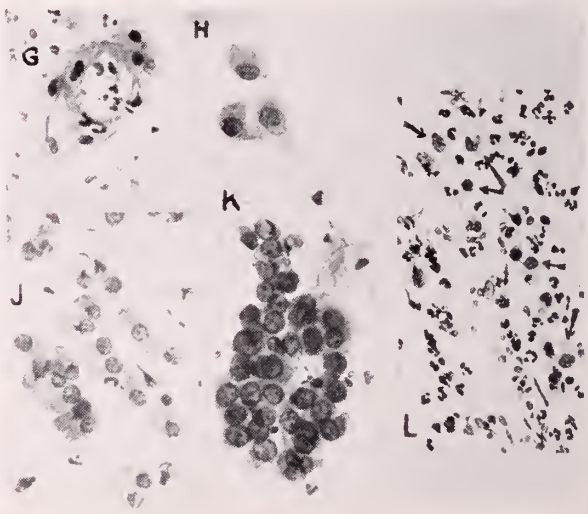

Fig. 2.—Papanicolaou smears.

Normal Cells II: G-J, cervical cells: G, onion peel shaped cell aggregate of squamous cells from vaginal portion of cervix; H, outer basal cells from cervix (note tailing); J, high columnar, ciliated cells from endocervix.
K, clusters of endometrial cells.
L, leukocytes and (arrow) mononuclear cells, mostly histiocytes.

portio vaginalis than in the endocervical canal.[4] Basing their conclusions on these anatomical studies they recommend that in cases of suspected but not obvious carcinoma of the cervix, the biopsy specimen be taken from the central junctional area of the anterior and the posterior lips as well as from the lateral angles of the external os.

The technical procedure of obtaining a Papanicolaou smear is exceedingly simple. Without prior douche or other cleansing the cervical os is swabbed with a cotton applicator and streaked over two clean slides in such a way that they become obviously but not too heavily coated with the secretion. The slides are then dropped immediately (before drying) into a jar containing equal parts of 95 per cent alcohol and ether in which they are submitted to the laboratory.

In office practice the same procedure can be followed; but in order to avoid transporting or shipping the jars, the slides are removed after a half hour and dipped into glycerine. Without wiping off they are next put together in such a way that the surfaces of the slides covered by the material are in contact with each other; they are then wrapped in gauze and paper and packed in suitable containers.

Care should be taken to label the smears properly; this is best done by using frosted slides on which the name and date can be written directly with pencil. Otherwise, diamond glass pencils should be used. Ink and gummed labels should be avoided.

In the interpretation of these smears the extremely variable cell content of the genital tract which changes constantly with age and cyclic activities must be taken into account. It is beyond the scope of this paper to attempt to describe the varying pictures. Figures 1 and 2 show some of the normal or typical cells routinely encountered.

Tumor cells assume an even wide variety of histologic features. Although it cannot be denied that occasionally they may become indistinguishable from typical cells, or that normal cells may assume atypical features resembling malignant elements, it is undeniable that most tumors produce cells with unmistakable evidence of malignancy. These consist of cellular and nuclear polymorphism, abnormal relations in the size of nucleus to the cytoplasm (at the expense of the latter) and hyperchromatism or irregular chromatin distribution in the nuclei with formation of prominent necleoli, as well as other abnormal staining reactions. It is also of diagnostic significance that tumor cells are very frequently cast off in sheets, clusters and groups whereby comparison of cellular and nuclear size is particularly facilitated. Pictures of tumor cells and tumor cell groups are shown in figure 3. All of these were taken from smears in cases in which the tumor diagnosis had been verified by biopsy.

In recent months we have studied Papanicolaou smears in 483 gynecologic cases. Of these, four clinically unsuspected carincomas of the cervix and one carcinoma of the fundus were diagnosed by this procedure. These are presented here briefly.

Case 1—A 44 year old white female was examined because of some increase of the menstrual flow during the past two or three years, menstruation having been regular and no other vaginal bleeding having been noted. No other complaints could be elicited. Physical examination including pelvic organs was essentially negative; the uterus was of normal size, anteflexed, and the cervix was apparently well epithelialized. Examination

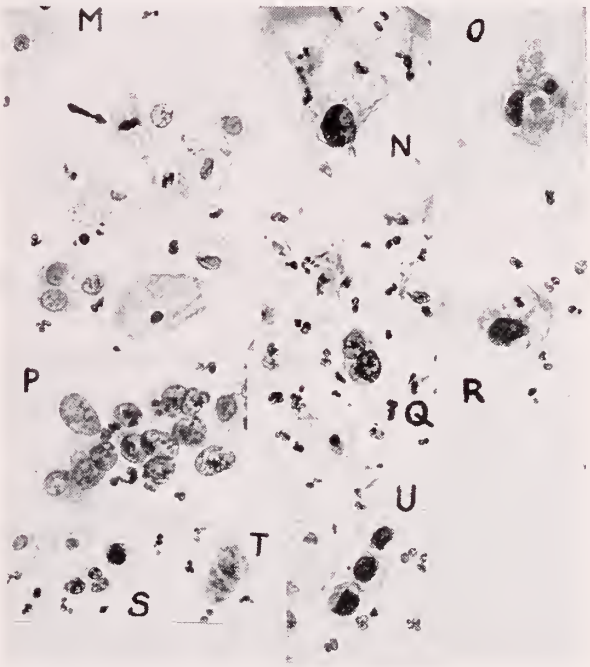

Fig. 3.—Papanicolaou smears.

Malignant Cells: M and N, from a case of highly differentiated squamous cell carcinoma of the cervix: M, nearly typical cell picture, with one mitosis (arrow) which is not diagnostic but arouses suspicion; N, surface cell with oversized, hyperchromatic nucleus—diagnostic.

O-U, from a case of squamous cell carcinoma of partially high, partially medium degree of differentiation: O, onion peel arrangement of squamous cells with hyperchromatic nuclei, representing highest degree of differentiation (atypical, malignant horn-pearl); P, cluster of dedifferentiated malignant cells, representing the lowest degree of differentiation in this tumor; note the irregular size of nuclei and prominent nucleoli; Q, double nucleated malignant squamous cell; R, cancer cell with dense hyperchromatic nucleus in phagocytosis; S, small group of epithelial cells, the one with the dark nucleus being diagnostic; T, group of three large, free nuclei-suspicious but not diagnostic; U, three small cancer cells (the nuclei are unusually dark and too large for the narrow cystoplasmatic rims).

of the Papanicolaou smear revealed atypical cells diagnostic of anaplastic carcinoma (fig. 4).

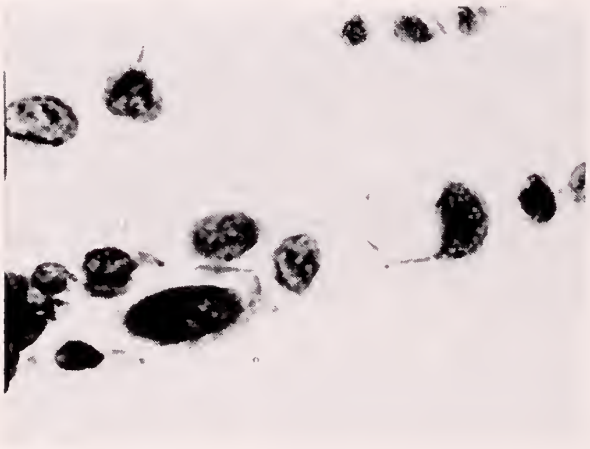

Fig. 4.—Papanicolaou smear, case 1. The cells are of unusual size and shape; their nuclei are large, irregularly shaped and deeply hyperchromatic. Vacuoles are either a sign of secretory activity or, as in this case, a sign of cytoplasmic degeneration.

Upon receiving this report cervical biopsy specimens were taken (at the central junctional area of the anterior and posterior lips and at the lateral angles of the external os), and the uterine cavity curetted. On histologic examination the curettings were not remarkable but in one of the cervical biopsy specimens there was revealed the presence of an epidermoid carcinoma of the cervix, non infiltrating, *in situ*, fairly anaplastic (fig. 5).

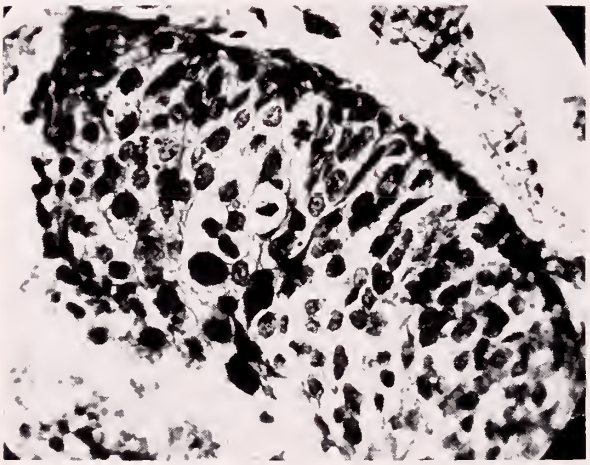

Fig. 5.—Cervical biopsy, case 1. Dedifferentiation of squamous epithelium with cellular pleomorphism and increased mitotic activity.

The diagnosis of epidermoid carcinoma of the cervix having been confirmed, a radical Wertheim procedure was performed (panhysterectomy with dissection of the parametria, obturator and iliac lymph glands). Examination of the uterus, tubes and ovaries revealed no further evidence of the carcinoma.

Case 2.—A 35 year old white female was examined in the clinic because of chronic pain in the left hip and left lower abdominal quadrant, a yellowish-white leukorrhea of several years' duration and intermittent vaginal spotting the preceding fifteen months, menstruation otherwise having been normal. Physical examination was essentially negative except for a nodular, firm enlargement of the fundus, which was freely movable, and a huge lobulated cervix which was firm and epithelialized except for a small area of erosion on the anterior lip of the portio vaginalis. Papanicolaou smears suggested the possibility of carcinoma of the cervix (fig. 6).

Cervical conization of the lobulated cervix was performed. Histologic examination revealed squamous cell metaplasia suggestive of a grade I squamous cell carcinoma of the cervix (fig 7).

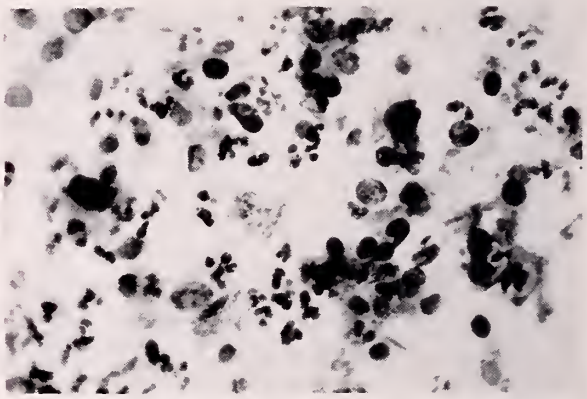

Fig. 6.—Paponicolaou smear, case 2. Among vaginal and endocervical elements of usual appearance, pleomorphous malignant cells with deeply hyperchromatic nuclei.

Case 3.—A 30 year old white female was studied in the clinic because of intermittent right lower abdominal quadrant pain of three months' duration and daily vaginal bleeding throughout that same period. Previous menstruation had not been remarkable. Physical examination was essentially negative with the exception of a firm, tender, nonmovable mass in the cul-de-sac extending into the left adnexa; the fundus did not seem to be abnormal; several small nabothian cysts were present on the cervix which also showed a minor degree of cervical erosion about the external os. The diagnosis of squamous cell carcinoma, probably of the cervix, was made from a Papanicolaou smear (cf. fig. 3, O-U).

Upon receipt of this report cervical biopsy specimens were taken at the usual four areas and the uterine cavity curetted. The uterine curettings were not significant but in one of the biopsy specimens squamous cell carcinoma of the cervix (fig. 8) was revealed.

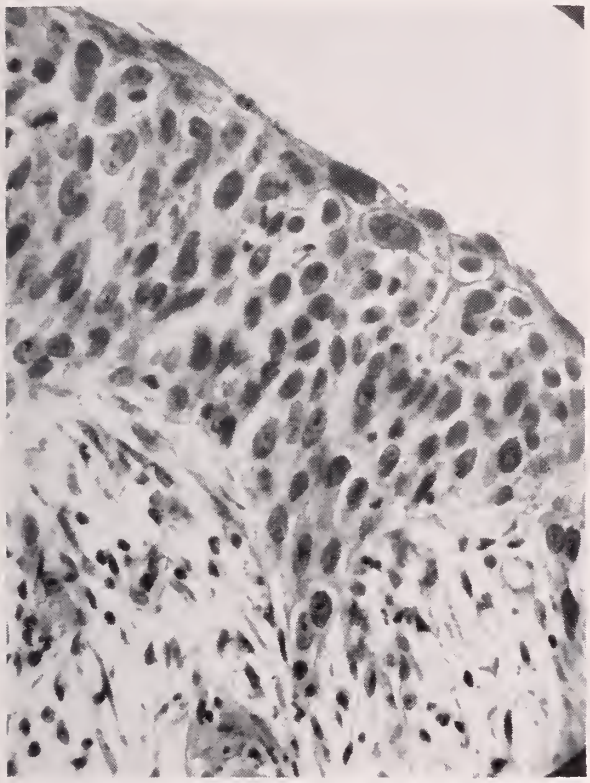

Fig. 7.—Cancized cervix specimen, case 2. Dedifferentiotion of squomous epithelium with marked cellular pleomorphism (corcinomo in situ picture).

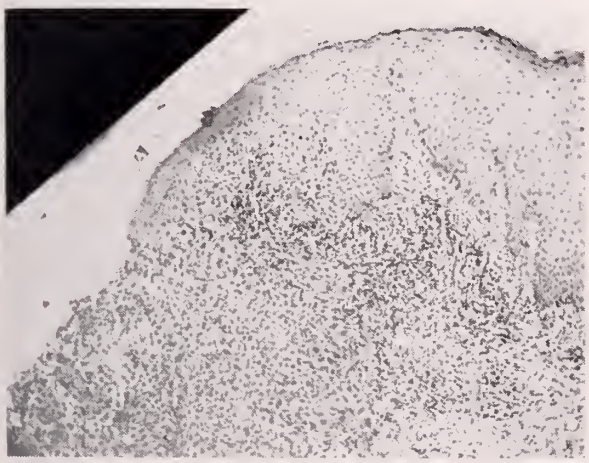

Fig. 8.—Cervicol biopsy, case 3. Malignant disbandment of the structure of the squamous cell lining with ingrowth beyond the epithelial borderline.

The patient was treated with 3840 mg. hours of radium placed within the uterine cavity and against the cervix. The symptoms and findings of pelvic inflammatory disease subsided under antibiotic and chemotherapy, and two months later a radical Wertheim procedure was performed. Examination of the uterus, tubes and ovaries revealed a pyosalpinx on the left and chronic salpingitis on the right but no evidence of carcinoma was found in the entire uterus. However, one small lymph node from the iliac chain on the left showed replacement of the lymphoid structure in the medulla by a polymorphic atypical epithelial formation of large cells showing intracytoplasmic fibrils, many giant nuclei, and mitotic cell divisions. Three weeks later postoperative x-ray therapy, in the amount of 6400 roentgen units, was given in divided doses over a three week period.

Case 4.—A 76 year old white female was examined in the clinic because of intermittent blood-stained leukorrhea during the past three months. Her menopause occurred at the age of 49. She had no other complaints. On physical examination a velvety erosion was seen on the central aspect of the anterior lip of the portio vaginalis. The cellular elements in a Papanicolaou smear were regarded as highly suspicious of malignancy (fig. 9).

Fig. 9.—Papanicolaou smear, case 4. Group of dark, irregularly shaped cells, suspicious of malignancy.

Biopsy specimens were obtained from the edges of the cervical erosion. The suspicion of malignancy was confirmed and a diagnosis of squamous cell carcinoma of the cervix was made (fig. 10).

The patient was treated with 3840 mg. hours of radium to the cervix.

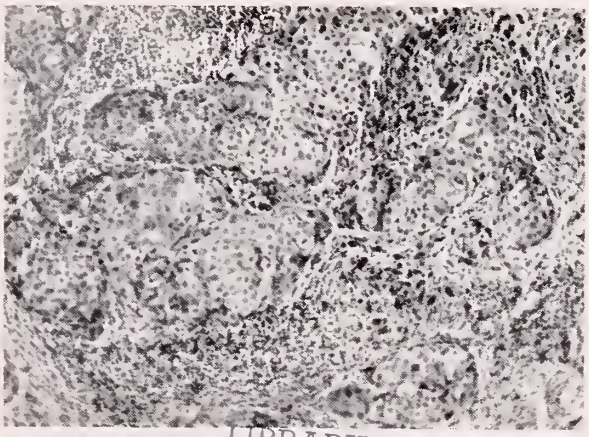

Fig. 10.—Cervicol biopsy, case 4. Nests of highly dedifferentiated squomous cells lying within the deep and inflamed stroma of the cervical tissue.

LIBRARY OF THE PHYSICIAN

Case 5.—A 57-year-old white female came to the clinic stating that she had gone through menopause one year previously but that since that time intermittent vaginal bleeding of two months' duration had occurred. There were no other complaints. Physical examination was essentially negative except for a large cystocele and rectocele and moderate erosion about the external cervical os; there were no apparent abnormalities of the uterus or adnexa. A Papanicolaou smear was highly indicative of a malignancy, the type of which could not be determined (fig. 11.)

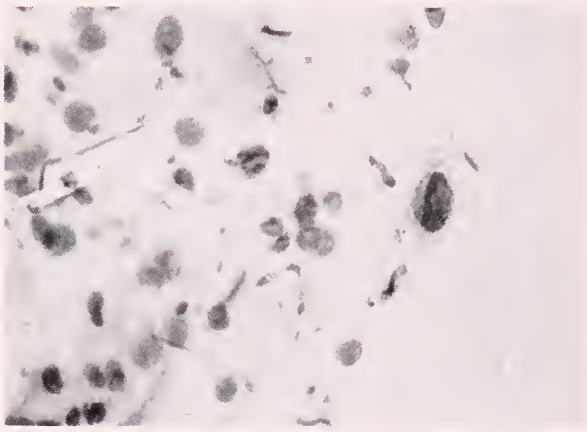

Fig. 11.—Papanicolaou smear, case 5. One single malignant cell containing a disproportioned, large, hyperchromatic nucleus.

Routine cervical biopsy specimens were taken and uterine curettement was performed. Examination of the biopsy specimens revealed only evidence of cervicitis, but in the uterine scrapings there was definite evidence of adenocarcinoma of the fundus of the uterus (fig. 12).

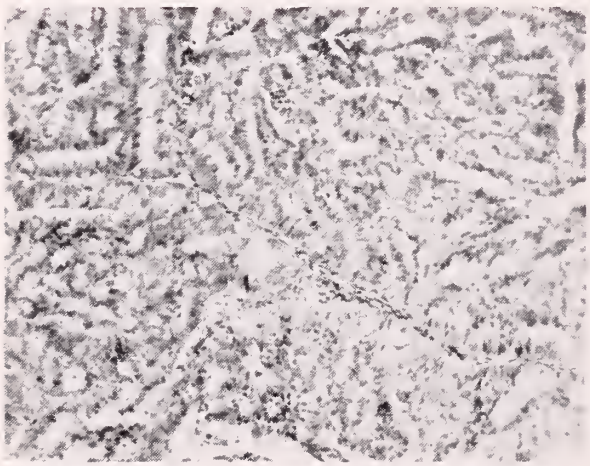

Fig. 12.—Uterine curettement, case 5. Closely packed, interlacing and intercommunicating glandular spaces with inadequate strama support (adenocarcinoma of fundus).

Radical panhysterectomy was performed. Examination of the uterus, tubes and ovaries revealed a fungating mass in the fundus, penetrating into the myometrium, diagnosed histologically as adenocarcinoma of the fundus of the uterus with solid pleomorphic cell infiltration into the depth of the myometrium, and tumor thrombi in the lymph spaces.

DISCUSSION

By means of Papanicolaou's smear method carcinoma *in situ* was diagnosed in case 1 in which there had been no symptoms and no cervical lesion. In case 2, by similar means, another very early, preinvasive carcinoma of the cervix was detected in a patient having metrorrhagia but no significant cervical lesion. Cervical carcinoma in cases 3 and 4) was histologically in a more advanced stage; both were diagnosed by smears from cervices which grossly showed apparently only cervical erosions.

In case 5, as the result of the smear examination on the first clinical visit of a patient complaining of slight postmenopausal metrorrhagia, strong suspicion of an existing uterine malignancy was aroused. No significant findings had been found on pelvic examination.

As stated in the beginning, the results of treatment of carcinoma of the cervix have shown little improvement over a period of years, one reason for this being that by the time diagnosis is made the malignancy has spread too far. Therefore, the hope of lowering mortality in carcinoma of the cervix lies in early diagnosis when the lesion is still confined to the site of its origin. A decisive step in this direction has been the development of the Papanicolaou smear technic.

It should not be overlooked, however, that false negative reports, as high as 10 per cent of cases or even slightly more, seem at present to be unavoidable even in the hands of an experienced pathologist.[9] Repeated examinations will overcome this source of error.

In conclusion, we feel that no pelvic examination can be regarded as complete without a Papanicolaou smear.

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PENICILLIN KEYSTONE OF SYPHILIS CONTROL

It appears to me that penicillin is the keystone of syphilis control. This is true in the public health sense inasmuch as penicillin renders the patient non-infectious and immediately limits further spread of the disease. It is also true in the clinical sense because penicillin can cure the individual infected with acute syphilis. Thus it can prevent the occurrence of late sequelae if given early in the disease.

In most instances penicillin also controls the late manifestations of syphilis once they have made their appearance in a patient who was previously inadequately treated or untreated. The importance of penicillin can be fully grasped when the public health aspect of control is considered. Public education, mass blood test studies, prenatal and premarital blood testing, and the investigation of the contacts of known cases represent ingenious devices used by the health officer to find new patients.

All of these devices are useful only to the extent that they succeed in placing patients into the hands of physicians who can then administer safe and effective treatment as soon as possible.—Edgar B. Johnwick, M. D., in Rocky Mountain Medical Journal.

SURVIVAL IF WE ARE FIT

The time has passed for any citizen to hinder the defense of this country in any way. The time has come when every citizen must think and work unselfishly for his country's welfare. We can still retain our opinions as to how our affairs have been conducted, but it is too late to rock the boat now. We must close ranks and present a solid front in an effort to survive. This test will require the earnest effort of every one of us. There will be sacrifices necessary by many that we do not like to think about.

Physicians, especially, will carry heavy burdens. If the atom bomb is used the role of civilian doctors will be of utmost importance. The number of medical personnel which the contemplated army will require will cause a real shortage of doctors on the home front. Each of us must turn in his best job and uphold the fine tradition which has been passed along to us.

Hard days are ahead, but with right on our side, and if we are strong enough, we will surely win. We must win.—Alfred Ellison, M. D., in J. Indiana St. Med. Assn.

TOTAL DEFENSE IN TOTAL WAR

Total war requires total defense involving utilization of all available elements of our population. Such preparation will not only reduce our casualties and enhance our ability to maintain our war potential but may be the actual deterrent to such attack and its disastrous consequences to all.—Louis Jaffe, M. D., in Detroit Medical News.

UNHERALDED HYPOTENSION AND CORONARY INSUFFICIENCY FOLLOWING THE USE OF VERATRUM VIRIDE IN THE TREATMENT OF PRIMARY (ESSENTIAL) HYPERTENSION

Case Report

By MAX KOENIGSBERG, M. D.,
Charleston, W. Va.

Although there is considerable controversy as to the merits of any of the dietary regimens being followed in the treatment of primary (essential) hypertension, most observers agree that there are no drugs of significant therapeutic value for the treatment of this disease. To date, the search for specific therapy has covered many drugs, but the one to be discussed although an old one pharamacologically, has not been used to any great extent clinically in the treatment of primary hypertension. However, during the past few years veratrum viride has been recommended, although guardedly, by several physicians as having a desirable hypotensive effect.

Quoting Freis,[1] "Clinically veratrum viride may be administered parenterally (Veratorne*) or orally (Vertavis**). The oral preparation seems preferable because it is more readily administered and its hypotensive effect is of longer duration. Vertavis tablets contain the whole dry powdered veratrum viride biologically standardized so that each tablet contains 10 Craw units. Following an effective oral dose of the drug the hypotensive effect usually begins in one to two hours, reaches a maximum in four to six hours, and ends in ten to fourteen hours. Therefore, in order to avoid cumulative overdosage it is usually expedient to administer the drug at eight to twelve hour intervals.

"Successful treatment with veratrum requires meticulous attention to dosage because of the nausea and vomiting that may occur, particularly during long-term administration. These undesirable side-effects may appear with doses only slightly greater than the therapeutic dose and in some patients with dose insufficient to produce a hypotensive effect. However, in most patients successful therapeutic results can be achieved by proper spacing of dosage.

"There is a great variability from patient to patient in the amount of veratrum required to produce a hypotensive response. Therefore, in hospitalized patients the effective dose must be determined in each instance by administering one tablet of Vertavis (10 Craw units) every two hours until a therapeutic or toxic effect results.

*Parke, Davis and Company.
**Irwin, Neisler and Company. (Also available: Veratrite Viride, 3 Craw Unit tablets.

Having found the level to which the patient responds this dose is administered at twelve-hour intervals morning and night. Vomiting is less often encountered if each twelve hour dosage period is further subdivided so that no more than 10 Craw units are administered each hour.

"In ambulatory patients, dosage is begun by instructing the patient to take one tablet (10 Craw units) before breakfast and before the evening meal. The patient is seen the next week approximately four to six hours after the morning dose, and his blood pressure is taken. If no hypotensive effect is observed and there have been no toxic reactions the dose is increased to 10 Craw units before breakfast and one hour later after breakfast, before supper, and one hour later after supper (four tablets per day). In this way the amount of the drug is increased by one or two tablets a day at weekly intervals until the effective and/or toxic dose has been determined. Occasionally patients may require readjustment of dosage either upward or downward after weeks or months of continuous treatment.

"The hypotensive response to long-continued administration seldom is as dramatic as that seen after short term administration. For this reason results have been especially favorable in the treatment of hypertensive encephalopathy when the drug was administered in doses of 10 Craw units every hour or two until the blood pressure was reduced."

In another rather intensive clinical study on humans, using this drug, Freis[2] and others came to the following conclusion: "The hypotensive response to veratrum viride occurred in two phases: (1) an initial adjustment phase followed by (2) a more stable hypotensive phase. The first phase was characterized by sharp and often fluctuating decreases in arterial pressure, pulse rate and peripheral blood flow. The second phase consisted of a steady state of reduced arterial pressure and pulse rate with a return of hepatic, renal and muscle blood flows to control values. Cardiac output in the second phase was found to be essentially unchanged from the pretreatment control values. These findings along with the decreased arterial pressure were accepted as indicating a decrease in peripheral resistance . . .

"While the second, stable phase of the hypotensive reaction to veratrum viride was characterized by generalized vasodilatation and a return of blood flow to normal, the initial falling phase of the reaction appeared to involve different mechanisms since it not infrequently was associated with parallel decreases in peripheral blood flow. Therefore, the initial fall in arterial pressure could not always be due to a generalized decrease in peripheral resistance. A depression of cardiac output might well account for the initial fall in arterial pressure."

More recently Wilkins[3] summarized in an excellent presentation the salient features of this drug with particular reference to its therapeutic effects, toxic manifestations and dosage. His experience has been that "salivation, nausea and vomiting are the most frequent of the unpleasant side-effects and circulatory collapse the most alarming—though usually innocuous—evidence of

Feb. 23

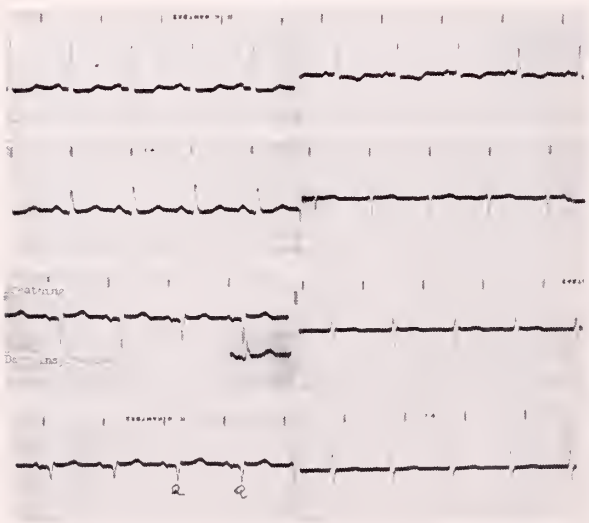

Figure I

March 2

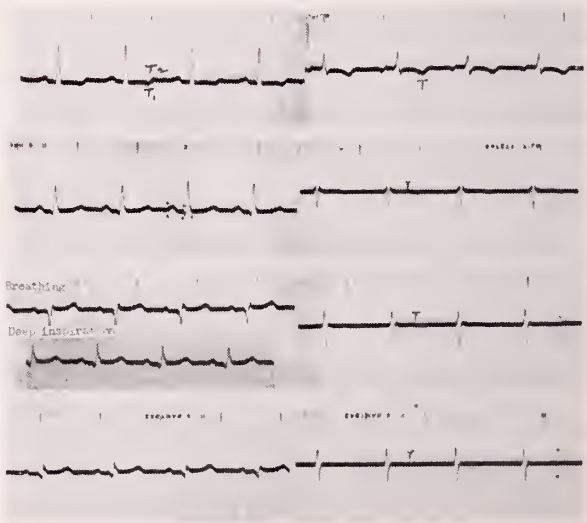

Figure II

Four electrocardiograms (not shown) made prior to the onset of the episode were normal. Electrocardiograms in figures 1 and 2 were made on the second and eighth day of the episode. Both of these show coronary insufficiency in comparison with previous electrocardiograms which date back two years. Subsequent tracings through March, 1951, were normal.

overdosage of the drug." In his series of cases 80 per cent of the patients treated were improved as judged by the average arterial pressures. He found that the most outstanding effect of the drug was to moderate and not eliminate the hypertension.

Wilkins[3] stresses that the correct dosage of V. viride in chronic cases is extremely vital and necessitates utmost cooperation between physician and patient. He points out that whatever the mechanism (producing nausea and vomiting),this annoying side-effect has continued to be the chief deterrent to the continuous use of V. viride in dosage adequate to produce hypotensive effects. He states further, "On the other hand, a certain degree of this (or some other) relatively harmless side-effect may be a desirable safe-guard against collapse or even fatal hypotensive reactions to the drug."

Unfortunately in the case reported neither nausea nor vomiting developed so that the only sign noted clinically was the hypotensive effect of the drug.

CASE REPORT

Mrs. L. K., a white female aged 63 years, was first seen Dec. 8, 1947. Her blood pressure was 220/130 and her primary complaints were dizziness, tinnitus and occipital headaches. The diagnosis at that time, after routine study, was primary hypertension of at least six years' duration. During the past two and one-half years treatment has consisted of the rice diet, low calorie and/or (most of the time) a low sodium diet with fairly good results, depending upon her cooperation. On April 2, 1949, when the patient was examined during a routine office visit the blood pressure was 154/98, and she had no complaints. She was then on a modified rice and low sodium diet. On April 26, 1949, the blood pressure was 188/122. She was placed on Veratrite with phenobarbital three times a day after meals and was kept on this medication until Dec. 17 when her blood pressure was 190/116 and Vertavis was substituted for the Veratrite, one tablet three times a day. On Jan. 7, 1950, the dose was increased to four tablets daily. On Jan. 28 the blood pressure was 160/100. On Feb. 15 the patient came to the office without a previous appointment complaining of extreme headache, dizziness and bleeding from the right ear. Her blood pressure was 210/140. She was hospitalized immediately on account of the hypertensive encephalopathy.

Routine physical examination and neurologic examination were essentially negative. The heart sounds were of good quality, were regular, and no murmurs were heard. Hg. 91%; RBC 4,600,000; WBC 7,200; differential count normal. The urine was normal. B. U. N. 14 mg. %; serum chloride 2-20-50, 544 mg. % (450-550 normal); cholesterol 190 mg. %. Blood serology negative.

Dr. J. T. Spencer, otolaryngologist, who examined the patient the same day with reference to the bleeding from the ear made the following diagnosis: (1) external otitis of the right ear canal, otitis externa hemorrhagica bullosa (probably viral), (2) chronic mastoiditis, left ear. Treatment consisted of penicillin and aureomycin for several days with local therapy to ear. He did not feel that the bleeding was due to the patient's primary disease. The original medication of Vertavis with phenobarbital was continued plus a low calorie, salt free diet and papaverine. The papaverine was stopped on the day following her admission.

On the day of admission (Feb. 15) the blood pressure was 210/140; on Feb. 16, 158/96; on Feb. 17, 160/94; on Feb. 18, 142/80 (it should be noted that on the last mentioned date the encephalopathy was considerably decreased) and on Feb. 19 the blood pressure was 138/86, the patient somewhat incoherent and confused. The Vertavis was reduced to 2 tablets daily from the usual 4. On Feb. 20 the blood pressure was 128/82, and it should be stressed that at this particular time the patient had no complaints referable to the cardiac area and was being urged to sit up (out of bed) twice daily. On Feb. 21 due to the persistently low blood pressure (120/70), an electrocardiogram was made which gave the impression of coronary insufficiency or possibly coronary occlusion or anterior infarct. This electrocardiogram and three subsequent ones in comparison with one made Dec. 9, 1947 showed significant alterations which bore out the diagnosis of coronary insufficiency rather than coronary occlusion or infaret. (see figures I and II). As a result the Vertavis was discontinued Feb. 21. The sedimentation rate taken the same day was normaland the serum chloride 544 mg. %. On Feb. 23 the blood pressure was 140/86; on Feb. 24, 130/80; on Feb. 27, 150/90; on March 1, 140/70. On March 4 the patient was discharged to convalesce at home since the blood pressure had been stable and she had been up and about for six days.

On subsequent examinations in the office the blood pressure was 158/100, 156/94 and 160/88 on March 20 and April 1 and 15 respectively; on her last office visit, April 29, it was 160/98.

COMMENT

At no time during this patient's stay in the hospital were there any signs or symptoms suggestive of coronary occlusion. The profound hypotension was the sole reason for making the electrocardiogram which disclosed the coronary insufficiency. Many Fantus tests were done on this patient's urine to rule out hypochloremia with resulting hypotensive syndrome and she exhibited no symptoms (such as profound weakness, muscle cramps, et cetera) suggestive of sodium chloride depletion. Repeated neurologic examinations did not show any evidence of cerebral hemorrhage or thrombosis. Moreover her diet was not altered at any time, neither during her hospitalization nor her convalescence at home.

This case illustrates an undesirable and potentially fatal effect of V. viride, particularly since the complication occurred without the nausea or vomiting which usually has preceded the vasomotor changes. If this patient had been under treatment at home or if she had been under treatment as an ambulatory patient (either of which may well have been the case had it not been for the ear complaint) and thus not under constant observation, continued Vertavis therapy may have produced more profound and irreversible coronary changes.

My experience with veratrum viride over the past year and a half has been similar to that of other observers in that it has been extremely difficult to establish a proper therapeutic dose without producing nausea or vomiting. However, in many instances, once the proper dose is established the drug has a beneficial effect in moderating primary hypertension.

SUMMARY

A case of primary hypertension which was treated with veratrum viride during a bout of hypertensive encephalopathy is presented. On a dosage of 4 tablets daily that the patient had been taking for five weeks prior to admission to the hospital an extreme hypotensive reaction developed, to the point of temporary coronary insufficiency. In this particular case the usual nausea and vomiting did not precede the temporary circulatory embarrassment which was evidently produced by the drug.

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MEDICAL EDUCATION'S GREAT NEED

Our country is experiencing a searching interest in medical education which is not only stirring the social consciousness of the nation, but is also arresting the attention of the profession itself. Physicians are being vigorously attacked for their intransigent social, political, and economic attitudes while at the same time almost every family has a son or a daughter, a nephew or a niece enrolled in a premedical course.

Greater numbers of our youth than ever before are seeking entrance into medical schools. Recent medical graduates by the thousands are looking toward the further educational experience of residency training in the medical specialties. A legion of practicing physicians is seeking out and attending the ever increasing number of postgraduate courses given throughout the nation.

What moties lie behind this feverish quest for medical knowledge? The stimulus of science is undoubtedly there. It prods the intellect today as it always has. There is however, an inferior motivation, a kind of pragmatic urge which is undermining the old ideals of medicine. "Short cut" courses and "quick reviews" are being encouraged in order to give the practical answers. The ideal of medical education from this point of view seems to be the acquisition of more and more "rules of thumb" for a more efficient and business-like type of practice.

The young student today seems to be less interested in Pasteur than in quickly getting into an office or clinic building of his own. Early marriage and an established practice rather than medicine itself are apt to be his goal.

Rather than being judged for their success in improving the professional soul, medical educators are today frequently criticized by practitioners for failing to teach students how to run an office, keep a set of books, fill out income tax returns, write board examinations, find a location in which to practice, and fight the evils of socialized medicine. The over-emphasis of this is an expression of an unwholesome philosophy which is growing into medicine.

Let us safeguard the fires of our profession. Our heritage must be protected and the old ideals must be kept aloft.—John S. Hirschboeck, M. D., Dean, Marquette University School of Medicine, in Wisconsin Medical Journal.

VASCULAR DISEASE AND DIABETES

Vascular disease is more frequent and severe in diabetics in whom the disease begins in the first or second decade and who survive more than 15 years than in those with an onset in middle life.—W. S. R. in Detroit Medical News.

THE CLINICAL USE OF LEVOPHED, A NEW VASOPRESSOR SUBSTANCE†

By WILLIAM A. SHAFER, M. D.,
Bluefield, W. Va.

It is the purpose of this paper to record the use of a new vasopressor or sympathetic effector substance, Levophed, or levo-arterenol dextro-bitartrate monohydrate,† which is the product of a lengthy investigation to develop a more desirable clinical sympathetic effector substance which would not have the undesirable side-effects of the known vasopressors. Levo-arterenol is approximately 164 per cent as active as levo-ephinephrine in increasing the blood pressure of anesthetized dogs when the two drugs are compared on an equal molecular basis. When compared on a weight for weight basis levo-arterenol is about 178 per cent as active as levc-epinephrine. The dextro-arterenol, however, is only 3-4 per cent as active as the levo isomer. The general shape of the blood pressure curve of levo-arterenol is essentially that of levo-epinephrine except that the secondary depressor phase is uncommon. Cocaine sensitizes the pressor response to both levo and dextro-arterenol to a much greater extent than to levo-epinephrine. The pressor effects of levo and dextro-arterenol are reduced but are not reversed (as is levo-peinephrine) by the injection of compound 933F. Ergotoxine abolishes this depressing action of 933F (benodaine). Excised strips of rabbit and guinea pig ileum are relaxed by levo-arterenol to about the same degree as levo-epinephrine. On the nonpregnant rat uterus, however, levo-arterenol is a relatively weak inhibitor since it takes about thirty times the concentration to reproduce the relaxation of the stimulated organs produced by levo-epinephrine. These results indicate that the levo-arterenol can produce inhibitory effects in at least some organs but that its spectrum of action differs from that of levo-epinephrine. Both levo-arterenol and levo-epinephrine injected subcutaneously produce slight stimulation in rats by the jiggle cage technic. Levo-epinephrine appears to be slightly more stimulatory although the difference between the drugs is barely within the limits of significance. Levo-epinephrine is from four to eight times more active than levo-arterenol in producing hyperglycemia in rabbits following subcutaneous administration. However, levo-arterenol is about five times as active as dextro-arterenol in this respect. Levo-arterenol again prolongs the duration of anesthesia produced by procaine but to a less degree than equal concentrations of levo-epinephrine. The acute intravenous toxicity of levo-arterenol has been determined in direct comparison with that of levo-epinephrine.

Levophed is administered clinically by placing 2-5 cc's of a 1-5000 solution in 500 cc's of 5 per cent dextrose intravenous solution, or in the newer ampule, by using 1 cc. of a 1-1000 solution in each 1000 cc. or 500 cc. of intravenous solution depending upon the rapidity of action desired. If the intravenous solution is running at the time when the use of the vasopressor is required allowances must be made for the amount of liquid already used. The solution can be administered rapidly until the blood pressure level returns to normal at which time the rate of administration is then adjusted to maintain the pressure at the normal level. Frequent checks on the blood pressure level are necessary during the early stage of administration of the drug, as prompt response of the blood pressure on administration will often cause a rapid rise which will continue unless the rate is decreased. Uses of Levophed have been found to be those of a vasopressor in anesthesia in general where through some manipulation the blood pressure may drop to low level and prompt and prolonged rise is required. It can be used in any situation in which vasopressor substances are required, the difference being that prolonged elevation of pressure in situations in which blood loss is not a factor is possible without any significant side-reaction occurring. This is of particular use in surgery of the autonomic nervous system in which continued administration of the vasopressor substance is useful and may be life-saving. It has been used in this connection for a period exceeding forty-eight hours without any apparent ill effects.[2] It can be used again in shock states with minimal blood loss as an adjunct to local anesthesia in the same manner as vasopressor substances already in use.

ANALYSIS OF FIFTY CASES IN WHICH LEVOPHED HAS BEEN USED

DISCUSSION

The response in general to the use of Levophed has been excellent. The rise in blood pressure is rapid, depending upon the speed with which the solution is run, and there is a conspicuous lack of rebound phenomenon or over elevation of pressure which commonly occurs with our common vasopressor substances. Once the blood pressure has been brought to a normal level its maintenance at that level is a very simple matter of adjusting the rate of flow of the solution and

*From the Department of Neurological Surgery, Bluefield Sanitarium, Bluefield, W. Va.
†The material used was supplied by The Department of Medical Research, Winthrop-Stearns, Inc.

while this usually is of a slow rate of 20-30 drops per minute, it is quite variable and depends on the circumstances and the patient's response. There have been no observed side-reactions to even the prolonged use of Levophed. A review of the operative charts reveals that there is little, if any, change in the pulse rate and respiratory rate during the administration of Levophed. This has been found to be the rule rather than the exception in patients of all age groups and all types of pathologic states. The blood pressure however, shows a prompt rise beginning usually within the space of 1-2 minutes and a prompt leveling off at normal levels as the rate of flow is adjusted. Over elevation of the pressure with a subsequent slow decline is not seen. In none of the cases reviewed is there a failure of response to Levophed. In five cases it was necessary to continue the use of Levophed in solution after the patient had returned to his room. This was done without any difficulty and the pressure maintained until the vasopressor mechanisms were again in effect. As the drug was withdrawn no sudden drop in pressure was noted. The cases used for this paper include a wide variety of pathologic conditions, operations and anesthetic agents. In neurosurgery they include laminectomies, a craniotomy, a ramisectomy and a ventriculocysternostomy. In general surgery there were several general abdominal operations and in chest surgery six lobectomies. There were also cases taken from the urological, the gynecological, and the E. E. N. T. departments. The anesthesia used for the most part was spinal, but included also local procaine, endotracheal ether, general ether and one case of rectal anesthesia. Approximately three-fourths of the anesthesias, however, were spinal. Anethetists using a considerable amount of spinal anesthesia usually find occasional need for vasopressor substances and most anesthetists have some favorite way of maintaining blood pressure level following administration of the anesthetic. In most cases of spinal administration there is a drop in pressure, probably due to splanchnic dilatation and loss of peripheral vascular control. The use of Levophed in cases of spinal anesthesia has been extremely efficacious and the results have been uniformly good. Also, here again it was noted that the use of other pressor substances had been tried prior to the Levophed, without essential response. Administration of Levophed, however, caused a prompt rise in pressure and a control by means of adjusting the rate of flow. In all cases in which Levophed was used no apprehension nor other subjective manifestation was noted.

SUMMARY

1. A brief summary of the clinical use of Levophed has been presented.

2. Its use and effect when administered during several kinds of anesthesia for various operations have been discussed.

3. The advantages of Levophed as a vasopressor substance are

   a. It is uniform in its pressor action.
   b. It is easily controllable and easily administered.
   c. It has little or no side-effects.
   d. It has none of the annoying rebound phenomenon.
   e. It has a wide range of toxicity.

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THE BIRTH OF THE NURSING PROFESSION

One hundred years ago this year one of the noblest prefessions in mankind's experience had its formal beginning. In that year beautiful Florence Nightingale, born in England of wealthy parents gave dignity, order, and purpose to the profession of nursing. She was an esthetic young woman, reared in luxury, whose first thirty-one years were devoted to the social graces and fine living. It was from this atmosphere that Florence Nightingale in 1851 broke loose from her family and plunged herself into a career of nursing. This was the beginning of the transition of the nursing profession from one of disrepute to one which is now acclaimed and respected by all mankind. Miss Nightingale believed that she had been called by God for this work. This dedication of her life to this cause is one of the brilliant chapters in human history.

From that day of unbelievably foul wards, with filth and stench pervading every hospital, the nursing profession has come a long way. The modern nurse has risen to a high position of esteem in the minds of everyone and her profession is an enviable one. This is a monument to multitudes of high minded women who, through the years, have unselfishly dedicated themselves to the advancement of this noble calling.—Alfred Ellison, M. D., in J. Indiana St. Med. Assn.

INTRAVASCULAR CLOT FORMATION

It is a paradox that more human beings over 50 years of age die as a result of intravascular clot formation than from any other single pathological mechanism.—J. F. in Ohio State Medical Journal.

Those who hope for no other life are dead even in this.—Johann von Goethe.

A STUDY OF THE PROGRAM OF THE DIVISION OF CANCER CONTROL OF THE STATE DEPARTMENT OF HEALTH

By H. C. HUNTLEY, M. D., M.P.H.,
Charleston, W. Va.

The Division of Cancer Control of the State Department of Health originated in legislation first proposed by Governor M. M. Neely in 1943. When passage of this Bill by the Legislature seemed questionable a flood of telegrams and personal calls from persons in all sections of the state who were alerted to the situation by the West Virginia State Medical Assocation and the West Virginia Branch of the American Cancer Society, secured enactment of the measure. The Bill setting up the Division set forth four definite proposal for tumor clinics, facilities for tissue diagnostic services and aid for needy cancer patients.

In the educational program stipulation was made that it would be for the purpose of preventing cancer and aiding in early diagnosis, and for the purpose of giving information to hospitals and cancer patients regarding the proper methods of treatment. In the same section it wisely provided that for educational purposes the Division may assist and cooperate with any state or national organization interested in an educational program for the prevention of cancer.

Since the inception of the cancer program this policy of cooperation with the two other organizations in the state which are chiefly interested in cancer control, namely, the West Virginia State Medical Association and the West Virginia Branch of the American Cancer Society, has been closely pursued. The personnel and the services of the state cancer society have been used to advantage in all phases of the cancer program.

The cancer information centers financed by the respective local cancer societies have provided invaluable assistance in educational work, follow-up of patients, contacts and referrals through the tumor clinics in operation throughout the state. Several members of the Cancer Committee of the West Virginia State Medical Association are also members of the Board of Directors and Executive Committee of the state cancer society as is Dr. N. H. Dyer, State Health Commissioner. This interrelationship has resulted in excellent cooperation and a well planned program of attack on the cancer problem in West Virginia.

The second provision of the law concerned the setting up of tumor clinics in general hospitals over the state. These were to be of sufficient number to be within reasonable traveling distance of any person in the state. This provision to a large extent has been met by the medical profession and the hospitals, obviating the necessity for setting up clinics under the direction of the cancer division. The procedure is a desirable one since the responsibility of the individual cancer patient should remain with the physician and the hospital of his or her choice.

The third provision for tissue diagnostic service for needy cancer patients and for suspects has been carried out through privately owned laboratories wherever qualified pathologists might be available. The money for this diagnostic service has been provided through federal funds for the past several years. This arrangement up to the present time has been satisfactory for both the practicing physician and the cancer division.

The last provision was that needed treatment be extended to those cancer patients who are medically indigent. The Division of Cancer Control is authorized to furnish aid within the limits of available funds in such a manner as to afford the greatest benefits to cancer patients throughout the state.

Recognizing that it was desirable to have definite policies, procedures and fee schedules which would be satisfactory to the physicians of the state the Cancer Committee of the West Virginia State Medical Association and the Cancer Advisory Committee of the Division of Cancer Control were called upon for help in working them out. These policies concern the eligibility of the patient, the qualifications of the physician treating patient and the fee to be charged. The policies and the fee schedule were adopted by the Public Health Council in December 1944 and have not been changed with the exception of an upward revision of fees paid for hospital care in 1949.

In order to be eligible for treatment two requirements must be met. First of all a person must be financially eligible. The question of financial eligibility may be determined on the basis of information furnished by the Department of Public Assistance; however, needy people do not have to qualify or be receiving assistance from this Department in order to be eligible for care under the Division. Application for assistance may be made through local health departments, cancer information centers, tumor clinics, local offices of the Department of Public Assistance or family physicians. The second requirements of eligibility under the cancer control program of the State Department of Health is that there be some hope of cure. Shortly after the program got under way in 1944 the number of referrals became so large that it became necessary to limit the program to those cases in which

LIBRARY OF THE
COLLEGE OF PHYSICIANS

there was a good prognosis in order that the available funds might be used to the best advantage. At that time an agreement was reached through joint planning with the Department of Public Assistance whereby those cases which were rejected by the Division would be given assistance if they met the Department's eligibility requirements. Such assistance consists of palliative treatment or other medical care which may be necessary to relieve extreme suffering and provide a reasonable degree of comfort.

On June 30, 1950 a full six years has elapsed since the beginning of the cancer program as it presently administered, and the results of the first year of operation can now be evaluated. It has been possible to follow and note the outcome of 503 cases that were aided in treatment through the Division of Cancer Control from the period of July 1, 1944 to June 30, 1950. As of June 30, 1950 the following results were found:

Total number of cases in which status to date is known	503
Known to have died of cancer	298
Died from other and unknown causes	39
Found to be non-malignant	40
Known to be living	126

The significant finding here is that 126 persons are known to be living a minimum period of five years after completion of therapy. It is probable that the greater number of these persons would have died had treatment not been made available for them through the funds of the Division. During this first year of operation $50,000 was appropriated for treatment. This presumably has resulted in a net saving of 126 lives at the cost of about $400 for each life saved. If we think of tax money as being spent for the greatest good for the greatest number of people, it is difficult to see how the $50,000 made available for this first year could have been spent to any greater advantage. This is particularly true when we consider the thousands of dollars that are spent in such things as highway construction and by industries to prevent a single fatal accident.

The successful operation of the program of the cancer division over this period of six years must be attributed on the one hand to the cooperation of the physicians in the State of West Virginia. Obviously success would have been impossible without their wholehearted cooperation and support. On the other hand credit must be given to Dr. Paul R. Gerhardt who was the first medical director of the Division and who has since become recognized as one of the leading public health authorities on cancer control in the nation and to Miss Anne M. Rouse who has so capably managed the Division for the past two years in the absence of a medical director.

In 1939 cancer was the cause of approximately 1400 West Virginia deaths. In 1949 cancer was credited with 1999 deaths. This year, according to preliminary statistics covering the first six months, over 2000 West Virginian's will die of cancer. Thus it becomes obvious that as long as we have an aging population cancer will continue to increase in importance as the cause of death. Only strenuous efforts on the part of all groups interested in the problem can check its progress. These efforts, among other things, must consist of increased facilities for the early diagnosis of cancer and an increasing effort to acquaint the public with the existing facts of cancer.

In order to provide increased facilities for the early diagnosis of cancer cytologic diagnosis must be made available to the general practitioner of medicine in the state. This method of diagnosis of early cancer has now been accepted as practicable in many areas of the nation. It is not infallible but neither is any other test on a mass screening basis, and it is far better to make mistakes through omission and commission in 10 per cent of early cancer cases than to make no diagnosis at all. There has been a steady increase in interest among the physicians and hospitals in the state in tumor clinics. At the present time there are thirteen of these clinics in operation, four of which have been established in the past year. There is need for more of these clinics. Even now, many of our physicians have to refer their patients from a distance of 80 to 100 miles to avail themselves of the facilities offered by the tumor clinics.

The need for the distribution of more information about cancer to the general public has been shown in recent studies. In the average community 40 per cent of the adult population still believe that cancer is incurable, and until we can acquaint the public with the fact that most cases are curable if found in the early stages, and until every person knows the common signs of early cancer and realizes the importance of early diagnosis, we will continue with increasing frequency to cite cancer as a cause of death.

SUMMARY

The effectiveness of the program of the Division of Cancer Control of the State Department of Health is shown by a study of the five year survival rates. These show a 25 per cent five year survival rate for the first year of operation of the cancer program.

The policies of the Division as approved by the Cancer Committee of the West Virginia State Medical Association have worked satisfactorily up to the present time. To bring a halt to the steadily increasing cancer death rate in West Virginia the following additional measures will be necessary:

1. Cytologic diagnosis available to every physician in the state.
2. Additional tumor clinics.
3. A greater dissemination of knowledge concerning the basic facts of cancer to the general public.

KEEP THAT DOCTOR-PATIENT RELATIONSHIP

There are many who cannot understand why the physician will not arrange his work along more practical lines (comparable to the assembly line in industry), so that he may serve more people with less effort on his part. Or why, having built up a demand for his services, he will not branch out and capitalize on his popularity.

As rational as these suggestions may be, their application to medical practice in its present state of development would represent a distinct loss. Probably not to the doctor, but certainly to the patient, for while the former would be able to call his time his own, the latter could no longer count on having his doctor when he wanted him.

Organization along the suggested lines is possible but its scope would be restricted to procedures that lend themselves to time-study and usefulness mainly for the patient separated from his environment. Those patient-problems that are never fully solved and require continuing contact with the same medical adviser just aren't suitable for dissection and distribution.—Wm. S. Reveno in Detroit Medical News.

DOCTORS GO TO WAR

We are at war. Our men are crossing the bar. We cannot leave them to die unattended in the sweat and blood of battle where the greed for power has placed them. Even those who feel the heavy hand of fate and face the beneficent turn of the golden gate need the comforting presence, the friendly touch, and the remedial measures including the amnesic effects of well directed care on the path of pain.

Tradition, training, and experience prepare the doctor for the cry of humanity, the call of country and the claim of conscience when calamity falls. Wherever the smoke of battle appears he is there, and sweethearts, mothers and fathers and wives and children throughout the world are glad. They know that the doctor goes to war not to destroy but to preserve, to mend, to comfort, to encourage, to restore and to save.

If there is anything more sacred under the stars and stripes it is the "Lady with the Lamp." Hats off to the doctor and the nurse in the thick of battle who stand by to serve and to save, yet if need be, to hear the one clear call across the bar.—J. Oklahoma St. Med. Assn.

MEDICAL EDUCATION IN WEST VIRGINIA

By D. A. MacGREGOR, M. D.,
Wheeling, W. Va.

As you all know, the original concept of our National Government was a very sensible simple plan for the administration of justice in the conduct of national affairs. It provided a congress to make the laws, courts to interpret them and an executive to enforce them. It was intended that each one of these three departments should act as a check upon the others. In recent years we have seen the executive department attempt to assume authority over the other Departments. As an outgrowth of this assumption of authority by the executive department, there has arisen a colossal fungus growth of commissions, agencies, administrations, and bureaus in Washington now numbered in the thousands.

Whereas the idea of the founding fathers was to have a central government which would respect personal liberty and state's rights, now we have a central government which seeks to regulate and control the private lives and business activities of its citizens down to the smallest detail. This control and regimentation is facilitated by the endless chain of bureaus and administrations whose so-called regulations have the power of law. Their tentacles reach into every farm and factory, into every business enterprise and every profession.

There is shameful waste of money and manpower in these multitudinous bureaus and administrations. About one person in every ten of our population is on the Government payroll. There might be some slight justification for the scheme if these bureaus gave us economical and efficient government. Exactly the opposite is the case. The larger the number of these agencies, the greater the confusion, conflict, and inefficiency. The one thing they really accomplish successfully is to regiment the greatest possible number of votes for the political party which created these agencies which swell the ranks of government payrollers.

BUREAUCRATIC CONTROL

The octopus of bureaucracy reaches out in all directions to get control of more people and their activities. For example, the federal government exercises nearly complete control over banks, railroads, and other public utilities. For more than twenty years the bureaucrats have been reaching for control of the medical profession. How many of you can remember back to the time

*Presented before the Second Annual Postgraduate Session of the Barbour-Randolph-Tucker Medical Society, at Elkins, June 21, 1951.

when we didn't have a Wagner-Murray-Dingle bill in the legislative hopper?

Of all the federal bureaus the one that irks me most, the one that is most malevolent toward the medical profession, is the federal security agency. It should be called the "federal insecurity agency." This is the bureau which uses the taxpayers' money to propagandize for socialized medicine not only in our own country but also in foreign countries. Your tax money and mine has been used brazenly for that purpose. This is the bureau which rewrites the Wagner-Murray-Dingle bill under one name or another every two years and lobbies for it at our expense.

Recently the federal security agency has been expounding the idea that we have too few doctors now and that the situation will get very much worse unless the federal government subsidizes the medical schools of the country. This propaganda which has gone out from the federal security agency purports to be supported by a statistical study made by that bureau, and it is so persuasive that several articles supporting the plan have appeared in current magazines and newspapers.

The FSA proposes that the federal government should give each medical school $500 per year per student and $1,000 per year for each student above the school's average enrollment. Naturally the scheme has met with the strenuous opposition of the AMA on the ground that we do not wish to have any federal bureau regulating the medical schools of the country. The power of the purse cannot be denied. When the federal government subsidizes a project it has a right to direct how the money shall be spent, and that eventually means regulation and control. When a federal agency regulates a business, a profession, or a project of any kind we all know that the chances are about 100 to 1 that it will be handled with inefficiency, extravagance, and an eye to political expediency.

COST OF MEDICAL EDUCATION SOARS

The medical schools do need money, not only for expansion but also for running expenses in these days of mounting costs and depreciated dollars. In 1948 we had seventy-eight medical schools and at least forty-eight of them operated at a deficit. Of the forty-eight schools, thirty-four were privately operated. The total deficit for these forty-eight schools approximated $10,000,000. As a matter of fact that $10,000,000 deficit does not reflect accurately the desperate plight of medical school finances. That record has been made at the expense of many undesirable economies. In some instances student enrollment has been limited, the teaching faculty has been kept as low as possible both in numbers and in compensation, and expenditures both for research and expansion have been kept at a minimum. It is certainly a short-sighted policy to curtail scientific research which is capable not only of developing miraculous improvements in the treatment of disease but also of making invaluable contributions to industry and human welfare in general.

Medical education is the most expensive item in the budget of any university. The undergraduate education of a medical student before World War I cost about $2,000. At the present time it is estimated that the over-all cost of such undergraduate education is $13,350. Tuition fees account for a bare 25 per cent of this figure and to raise them much higher would restrict the enrollment to the sons of the rich, a very undesirable situation. A detailed study of the financial and related problems in medical education and research has been made by a Public Health Service committee headed by Dr. Lowell J. Reed, of Johns Hopkins University. In the report of this committee it is disclosed that a minimum of $40,000,000 additional funds annually is needed to cover the operation of medical schools at the present level of enrollment.

FEDERAL GRANTS UNDESIRABLE

I maintain that the most costly way to meet the deficit of the medical schools would be to accept the funds from the federal government. Aside from the fact that such action would eventually place the medical schools under the domination of the FSA, my objection is that any sum of federal funds allocated to the medical schools would represent about twice that amount of money taken from the taxpayers. We are told that the country is not actually at war and yet we are all paying such high direct and indirect taxes that practically no one can really save anything for his old age.

The federal government has no money of its own and can make no money legitimately. The only money the federal government can disburse is money that it takes from you and me. If you give a hundred dollars to your medical school it will reach the school intact and probably it will be used economically. If you give $100 in taxes to the federal government it will be handled by a thousand grasping hands. It will be collected, audited, checked, and double-checked, deposited in general funds account, voted upon, appropriated, reconsidered, allocated to a special fund, audited, checked, and entrusted to a disbursing agent who will tie it up in red tape by requiring application forms, certificates of necessity and

authority, together with notarized copies of the university balance sheets for the past five years, all in quadruplicate, before he finally distributes what is left of your $100 to the medical school. That is bureaucracy at work. You'll be lucky if $50 or $60 of your original $100 actually reaches the medical school.

ALL MEDICAL SCHOOLS NOW CLASS A

Forty years ago we had a large number of substandard medical schools in this country. We had many so-called diploma mills. At this time the country was well-supplied with doctors numerically, but the training and the ability of a large percentage of those doctors was also substandard. It required about 20 years to eliminate all of the substandard schools. We now have only seventy-two four-year medical schools and all are Class A.

During the past ten years the number of physicians graduated has exceeded the number of physicians who died or retired by an average of 2,000 annually. The annual percentage increase of physicians compares favorably with the annual percentage increase in the general population. At the present time we have one doctor for approximately 730 people—exactly the same ratio as we had thirty years ago. However, the amount and quality of medical service which can be rendered by modern doctors has been enhanced many fold.

When a doctor is graduated now we may be sure that he has been exposed to first-class medical training. When he goes into practice he has the advantage of using innumerable mechanical and laboratory aids as wells as technical assistants so as to reduce to a minimum the time required for diagnosis and treatment. He can render satisfactory medical service to ten times as many patients in a given length of time as could his grandfather of the pack saddle, pill peddling era.

In the old days if a doctor visited a patient who lived twenty-five miles from his office it usually required two full days to make the round trip. At present with good roads and fast transportation a doctor can make such a call and be back in his office in three hours, allowing for practically a whole hour with his patient. Better still, the patient may be transported comfortably in an hour or less to a hospital or diagnostic clinic where teams of technicians are available to assist the doctor to arrive at a more accurate diagnosis or to render more efficient treatment. Our modern doctor can handle a case load about ten times as large as his predecessor a half century ago and do infinitely better work.

LIFE EXPECTANCY DOUBLES

Let us look at the record. When I was born, the average life expectancy was 34 years. When my grandchild was born this year the average life expectancy was 68 years. In other words, life expectancy has increased 100 per cent during my lifetime, and this miracle was accomplished during a period when the practice of medicine was conducted as a private enterprise without the spurious benefit of governmental assistance.

FSA IGNORES FACTS

The federal security agency, which seeks to socialize the practice of medicine in the United States, tells us that we have a serious dearth of physicians now and that, at the present rate of increase (2,000 per year), by 1960 the country will have 40,000 fewer physicians than will be needed. Of course this is pure propaganda designed to convince the public that the national government should now take over the medical profession and make a big success of it. They ignore the fact that we now have more doctors per capita than any other country in the world except the new state of Israel which is flooded with refugee physicians from the wartorn countries of Europe. They ignore the fact that our death rate in the United States is one of the lowest and our life expectancy is one of the highest in the world. They ignore the fact that private enterprise and community enterprise by cities and states have provided a system of medical education of which we may justly be proud, and that the system is being gradually expanded in a practical manner by enlarging existing medical schools and establishing new ones where they are needed.

We have good reason to fear having the assistance and regulation of an agency of the federal government forced upon us. We have seen the beneficient results of the nationalization of medicine in England and practically no one except the grasping politicians wants to have anything to do with it. We have seen what nationalization has done for the coal mines of England. In our own country we have witnessed the colossal failure of the national government when it took over the railroads in the first World War. We are well aware that when our government went into the public utility field the only way the business could be made to appear to be self-supporting was by a questionable system of bookkeeping. The recent disclosures in connection with the maladministration of the RFC were so disgraceful that we are all convinced that the federal government should stay out of the banking business.

AMA EDUCATION FOUNDATION

Let us come back to the mounting costs of medical education and the appalling annual deficits of our medical schools. We know that we should close our ears to the siren song of the federal security agency which would promise abundant federal funds to pay our deficits and build new medical schools at the price of disproportionately higher taxes and the scourge of federal regulation.

Two years ago the AMA took the first step toward voluntary liquidation of the medical school deficits by appropriating $500,000 toward a fund for that purpose. That money was contribution from all of the doctor members of the organization. California's doctors contributed another $100,000. The doctors in some other states have contributed either personally or through their state organizations. The council of the West Virginia State Medical Association contributed $500 this year, a small sum but what they felt they could afford.

E. T. WEIR BOARD MEMBER

Realizing the precarious financial state of the medical schools of the country and the desirability of support from private sources, the National Fund for Medical Education, Inc. was founded in 1949 by a group of men and women who believe that a way can be found to attract much needed voluntary support. The board of trustees of this non-profit organization is composed of sixty-two prominent philanthropic citizens. Herbert Hoover is honorary chairman. Ernest T. Weir, of Weirton Steel, is the one West Virginian I noticed on the list.

This board proposes that America's great corporations and insurance companies be invited to take the lead in this movement to forge a pattern of practical benevolence in support of medical education. I am not able to enumerate the many direct and indirect benefits which accrue to industry from the availability of good medical care and doctors specially trained in industrial medicine. It will suffice to quote one paragraph from an address by William B. Given, president of American Brake Shoe Company:

> "Progress to still better working conditions will be retarded, perhaps actually stop, unless there is a sufficient flow of competently trained doctors and nurses to our ranks. These doctors cannot be equipped with sufficient knowledge in schools where industrial medicine is taught in a half-hearted way by inexperienced teachers. There must be high educational standards. Such doctors should have at least one year of specialized graduate training. Back of them must be adequate research and with them engineers trained in industrial hygiene who recognize health hazards and know how to correct them. . . . Today the company which plans to continue in business needs these people just as definitely as it needs engineers and other technical men. To the extent we can afford, we must support medical education and medical research just as we do technical education and product research."

It seems reasonable to believe that the National Fund for Medical Education will be successful and that industrial corporations will respond so generously that the financial security of our medical schools will be assured without subjecting them to the blighting influence of federal assistance and regulation.

MEDICAL EDUCATION IN WEST VIRGINIA

As you all know, we have our own problem of medical education for the State of West Virginia. It is a problem on which your State Medical Association has been working for more than a decade. When we urged a four-year medical school for the State of West Virginia, the University administration was interested but not enthusiastic. The idea was given grudging approval but no active support, rather the opposite. Of course, there was a very good reason why the administration dragged its feet. It realized much better than our doctors' committee that a four-year medical school would require such a large percentage of the University budget that it might destroy all hope for expansion in other departments.

FOUR-YEAR SCHOOL ASSURED

After many years of frustration and disappointment we were happily surprised within the last few months when there occurred a most fortunate conjunction of circumstances which has made the creation of a four-year medical, dental, and nursing school for the State of West Virginia a reasonable possibility. In the first place, we had the active cooperation and support of Governor Patteson, without which the plan would have failed as it did in previous legislative sessions. In the second place, we had an active committee headed by dynamic Frank Holroyd, now president of the West Virginia State Medical Association, who was ably assisted by our tireless executive secretary, Charles Lively, the man who has actually done more work on this project than anyone else. In the third place, we were fortunate enough to secure the passage of legislation designed to provide ample funds for the creation and maintenance of a first-class institution. These funds, which are separate and apart from the University budget, should be the perfect balm for dragging feet.

MAINTENANCE FUNDS PROVIDED

We may be wrong, but as we see it now the one cent tax on soft drinks should supply ade-

quate funds for the medical, dental, and nursing school for the present and for the indefinite future. The school should be able to operate successfully without other financial assistance, private, state, or federal, and that will place the institution in a most enviable position. There is a possibility that in the future some unscrupulous politicians may seek to curtail these tax funds or divert them from the purpose specifically stated in the law. Up in our part of the state we have one sour and suspicious editor of a paper which supports the more or less loyal opposition. He prophesies openly that the funds to be raised for the medical school will never be used for that purpose. If ever a thing like that should happen and our plans for a Class A four-year medical school be nullified by political trickery, I think an army of outraged citizens would lower the boom on the men who engineered the scheme. There should be no safety or security for such saboteurs in the state whose motto proudly boasts: "Montani Semper Liberi".

LOCATION NOT PRIMARY CONSIDERATION

As I write this paper, the Governor has not as yet named the site for the medical school. I hope he will make a practical realistic selection. Other things being equal, it is certainly desirable to place a medical and dental school in a fairly central location and in a well-populated area where there will be an abundance of clinical material. However, the location of the school is not our first consideration. What we want is a first-class medical, dental and nursing school for the benefit of our citizens, particularly the boys and girls who wish to specialize along these professional lines.

I have respect for and confidence in the Board of Governors of the University. Wherever the school may be located I believe that they will create an institution of which we may be proud and build it as rapidly as the available funds will permit. Building a medical school is a tremendous undertaking. It will require years to secure the proper talent for the faculty. In time, possibly ten years, the Medical College of the University of West Virginia should take its place among the outstanding medical schools of the country.

In spite of the opinions held in certain quarters it seems that serum cholestrol values rise from youth through middle life tending again to lower value in old people.—J. F. in Ohio St. Med. J.

In prostatic cancer without metastasis castration or estrogens appear to have equal therapeutic value but the two combined promote increased survival. —W. S. R. in Detroit Medical News.

THE DEATH OF JAMES BOSWELL, ESQ., 1740-1795

Sic Transit Gloria Mundi

By EDWARD J. VAN LIERE, M. D.
Morgantown, W. Va.

James Boswell's *London Journal*, a current best-seller, has revived the public's interest in this distinguished man of letters. Boswell was not a medical man or, as far as we know, did he ever show any especial interest in biologic matters. The question may well be asked why one should write of Boswell in a medical journal. This man, the greatest of all biographers, deserves attention of learned men in all walks of life. The nature of a physician's work brings him in contact daily with life and death. Since the physician is an educated and cultured man, it is fitting that he evince an interest in the lives of great men from the time of their birth to their death. Let us, therefore, examine briefly the final illness of James Boswell, Esq., the confidant and biographer of the illustrious Samuel Johnson, L. L. D.

Boswell in spite of his severe drinking bouts and his lecherism had always remained, as far as is known, in reasonably good physical health up to the time of his final illness. As a young man he had several attacks of gonorrhea, but presumably suffered from no major illnesses. In point of fact, he had even escaped the gout which was so prevalent in that age and from which the great William Pitt even was not spared.

Boswell's mental health, on the other hand, left something to be desired. Like his learned friend, Samuel Johnson, Boswell suffered periodic attacks of melancholia. These may have been the cause of his drinking bouts. It is not in the province of this short essay to pursue this topic further. Suffice it to say that he was a heavy drinker for many years. In spite of this, however, as previously mentioned, there is reason to believe that rarely was he physically ill until he was 55 years old.

As far as I am aware, the actual cause of Boswell's death has never been fully described. Presumably no autopsy was performed. Mr. D. B. Wyndham Lewis, the distinguished English writer, who wrote a biography of Boswell* stated that Boswell had a tumor of the bladder but also had uremia "or kidney trouble." It would be of interest to know whether Boswell had suffered from hypertension. He is pictured as possessing a physique which we associate with hypertensive disease and the life he

*D. B. Wyndham Lewis, "The Hooded Hawk," Longmans Green and Co., New York, 1947.

led could well have stimulated this condition. Whether or not he suffered from hypertension will never be known, for the sphygomanometer had not as yet been discovered. The question arises also whether the tumor of the bladder was malignant. This, too, will never be known.

Be that as it may, on April 13, 1795, Boswell attended the Literary Club; he collapsed and was quite unable to walk home. It was the beginning of the end. A day or two later he tried to write to Temple, one of his best friends, who had suffered injuries in a riding accident. Boswell could write only the first sentence and indeed that was hardly legible. He was forced to dictate the remainder of the letter to his son, James Boswell, Jr. His dutiful son added a private postscript stating that his father was ignorant of his dangerous illness, although the past day or two he had shown some slight improvement.

Boswell was attended by Dr. Richard Warren, a member of the Literary Club and Physician to the king. Also in attendance were Mr. Earle, the surgeon, Mr. Devanges, the apothecary, and Mr. Kingston.

A few days after his collapse at the Literary Club he became gravely ill and suffered from violent headaches, fever and chills and also had vomiting spells. These symptoms point definitely toward a grave condition of uremia. On April 24 he recovered sufficiently to dictate a sprightly letter to Warren Hastings, who had just been acquitted of high treason, by the Lords in Westminister Hall.

About ten days later Boswell's condition worsened. He grew much weaker and his vomiting became intensified. One day when he felt a little stronger, at his request, the surgeon in charge allowed him to be lifted out of his bed, but Boswell fainted away. The end now was near. On May 19, 1795, at two o'clock in the morning, he expired. At his bedside were his brother, David, his sons, Alexander and James, and his daughters, Veronica and Euphemia. According to Malone, one of Boswell's literary executors, he died without pain or effort.

So passed away one of the great English writers and the greatest biographer the world has ever known or probably ever will know. He was not buried in Westminister Abbey, but in his family vault at Auchinleck, Ayrshire. Lesser men than he have had their mortal remains laid away in the famous Abbey. Thomas Babington McCauley, Boswell's most heartless critic, recognized the genius of the great biographer when he wrote this beautiful sentence: "And yet his writings are read beyond the Mississippi, and under the Southern Cross, and are likely to be read as long as the English exists either in a living or a dead language."

OUR PRIMARY WEAPON

Everyone knows that you can't unscramble an egg. Its structure and individuality is destroyed forever.

If we relax our efforts to prevent central control of health matters and thus permit these affairs to be handled by a Government Bureau, you may rest assured that no matter how miserable a job those in authority may do they will never return it to us.

We are compeled to win this fight every year on every front. We must win every time. One loss and we are sunk. The cat is said to have nine lives, but we have only one.

Our future depends upon good Public Relations. It is the primary weapon in our possession to defend ourselves. If the public thinks ill of us we are lost. They must be taught to expect the best from us, and they usually get it. Only the unusual makes news, the mistakes we make in our relations with our patients, and gives our critics an advantage. Our medical organization must discontinue hiding its light under a bushel. The way to fight an idea is with another idea. The intelligently informed person is difficult to mislead.

Two things must be done. We must let our good points be known and we must reduce our poor ones to a minimum.—Edward T. Kirkendall, M. D., in Bulletin, Columbus Academy of Medicine.

THE DOCTOR AND THE SOCIAL REVOLUTION

Our nation has undergone, and is still undergoing a profound social revolution. How far we have yet to go will depend upon the recovery of sanity by the electorate. I hate to think we are going the entire distance to the Welfare State, but we are certainly well on the way and it is a possibility that we cannot ignore.

One fact we must accept. There will be no retracing of our steps. We shall never have the country we had 40 years ago. The best we can hope for is to arrest our pell-mell rush into complete socialism.

For its own salvation, to prevent complete disaster, the medical profession may recognize the existence of this revolution and must adjust to it. We must examine ourselves critically and weed out both practices and practitioners that are inimical to the public interest. And, lastly, we must try conscientiously to support the practical efforts that are being made to maintain the freedom of medical practice.

We have the choice only between two courses—with our feet firmly planted upon the great traditions of medicine, we can sway with the storms that beat upon us . . or we can stand rigidly and unyieldingly upon our selfish interests and be broken against the wall of public opinion.—Connecticut St. Med. J.

Papillary carcinomas of the thyroid generally metastasize to lymph nods while the non-papillary spread via the blood stream.—W. S. R. in Detroit Medical News.

TUBERCULOSIS ABSTRACTS*

PNEUMOPERITONEUM IN TB TREATMENT

The present era is replete with major innovations in the treatment of tuberculosis, yet pneumoperitoneum continues to provoke the discussion and controversy usually accorded a newcomer. First employed for the treatment of intestinal tuberculosis, then largely abandoned, pneumoperitoneum was subsequently recommended by Banyai for treating pulmonary tuberculosis almost 20 years ago. Experience has not yet defined the legitimate place of pneumoperitoneum among our therapeutic resources. Therapeutic pneumoperitoneum is produced by the instillation of air through a needle into the abdominal cavity much as air is introduced into the chest by pneumothorax. This air fills the space which surrounds the abdominal organs and which is separated from the contents of the thoracic cavity by the diaphragm.

In pneumothorax the object is to produce relaxation of a tuberculous lung by the action of the air which surrounds it and allows the lung to collapse. In pneumoperitoneum, also, the object is relaxation of a diseased lung. Here, however, the air does not act directly upon the lung but acts upon the diaphragm, increasing the pressure beneath it which causes it to rise higher in the chest. This reduces the size of the thoracic space and the lungs retract to a smaller size and relaxation results.

The diaphragm is fixed at its periphery and is composed largely of a sheet of muscle covered on the chest side with pleura; on the abdomen side, with peritoneum. Its resistance to stretching can be markedly diminished if the muscle of the diaphragm is paralyzed by crushing the phrenic nerve in the corresponding side of the neck. Hence, phrenic paralysis is often used in combination with pneumoperitoneum.

In discussing therapeutic pneumoperitoneum, comparisons with therapeutic pneumothorax inevitably arise. Neither involve the immediate trauma and shock of thoracoplasty and pulmonary resection. Hence, either pneumothorax or pneumoperitoneum can often be applied where bed rest alone is inadequate but where major surgery does not appear suitable.

Both pneumothorax and pneumoperitoneum can be administered with reasonable hope that the collapse effect produced by them will remain subject to the control of the physician and that the collapsed lung will return to its pre-treatment size and function when treatment is terminated. Unfortunately, this hope is all to often unfulfilled.

In the period from 1930 to 1940, pneumothorax was regarded as the best form of collapse therapy for the vast majority of patients. Thoracoplasty was rarely employed except after an unsuccessful pneumothorax and resection of a tuberculous lung was deemed too hazardous. Pneumothorax was, however, impossible in many patients because the diseased lung was adherent to the chest wall. Complications were frequent and some of these were more serious than the pulmonary tuberculosis itself. Certainly the overall results from widespread use of pneumothorax were disappointing. This led some clinics to avoid pneumothorax in all but exceptional circumstances; others continued to use it readily, but with much greater discrimination.

The decline in the use of pneumothorax has been accompanied by an increase in the use of pneumoperitoneum. Pneumoperitoneum enjoys the obivous advantages of a temporary and reversible collapse measure without many of the disadvantages of pneumothorax. Experience with pneumoperitoneum has demonstrated that, in competent hands, it is a relatively safe and well-tolerated procedure, and is capable of favorably influencing the course of pulmonary tuberculosis in many cases.

Up to this point, agreement among tuberculosis physicians is fairly uniform. Beyond this point, one encounters markedly divergent opinions and claims. The difficulty of evaluating a therapeutic procedure in a disease as protean in its manifestations and as variable in its behavior as pulmonary tuberculosis has long been recognized.

The advantages of pneumoperitoneum are most apparent in the treatment of patients with acutely active tuberculosis who are too ill for immediate thoracoplasty or resection and in whom complications from pneumothorax are excessive. Pneumoperitoneum is especially valuable as a means of producing sufficient improvement to prepare such patients successfully for major surgery. Modern chemotherapy has lessened the need for pneumoperitoneum in this particular role but it is sometimes advantageous to use both pneumoperitoneum and chemotherapy.

Also, a temporary collapse measure is still widely preferred to major surgery for the treatment of patients in whom the extent of disease and of pulmonary damage is limited, although the increasing number of successful results from the localized resection of tuberculous lesions may radically alter this attitude. Pneumoperitoneum provides such a temporary collapse. The advantages of increasing the effectiveness of pneumoperitoneum by adding phrenic paralysis must be weighed against the permanent functional impairment which frequently results from the combination.

While modern surgery and modern chemotherapy have reduced the indications for temporary collapse of a lung, the need has not been eliminated. Many physicians still prefer pneumothorax for this purpose, but pneumoperitoneum can be employed even when pleural adhesions prevent satisfactory collapse by pneumothorax. Moreover, pneumoperitoneum can be employed with safety where the hazards of pneumothorax are excessively high.—Kirby S. Howlett, Jr., M. D., in the NTA Bulletin, March, 1951.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Associatoin.

POLIO AND PREGNANCY

Of two groups of approximately similarly aged women, those who are pregnant are more susceptible to polio (due to increased circulating cortisone?)—W. S. R. in Detroit Medical News.

The President's Page

We can't understand why any of our doctors miss the state meetings at White Sulphur. It looks like a perfect set up to us. The surroundings are beautiful, the hotel service all one could desire, and the food wonderful.

The program committee has arranged an excellent program, the details of which are outlined elsewhere in this issue of the Journal. You get an opportunity to see all your old friends and make many new acquaintances. There is swimming, golf, tennis and any other sport you could want. There are plenty of comfortable chairs if you just want to sit.

To see the politicians in action is alone well worth the cost of the trip. If you want to stay up all night and drink branch water you'll have plenty of company. If you want to get up early in the morning we understand you'll have company on that too. The whole deal is deductible on income tax. Everyone has a wonderful time and we can't see how you can afford to miss it. We hope you won't.

Frank G. Galloway

President.

P. S. Don't forget to bring your wife. She will have lots of fun, too.

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THE 84TH ANNUAL MEETING

When Frank Holroyd bangs the gavel to mark the opening of the 84th annual meeting of the West Virginia State Medical Association, there will probably be present at the Greenbrier in White Sulphur Springs the largest number of West Virginia doctors and their wives ever to attend such an affair at this world famous resort.

Indications are that all available rooms will have been reserved by July 1, and efforts are now being made to try to have the ceiling of 650 persons raised to accommodate doctors who have not previously been sure they could attend the meeting.

The scientific program is certainly one of the best that has ever been arranged by the program committee. Dr. L. J. Pace, the chairman, and Drs. Cecil O. Post and James L. Wade, the other members, have succeeded in obtaining as guest speakers some of the very best known members of the profession to be found in the country.

The afternoon section and society meetings are more attractive than ever, and programs comparable in value to the general sessions have been arranged by the participating groups. For the second consecutive year, every section and affiliated society and association has scheduled a meeting. The West Virginia Chapter of the Medical College of Virginia Alumni has arranged its usual annual banquet, and the Woman's Auxiliary has gone all-out in its efforts to provide speakers and entertainment for its two luncheons. The meeting will end with the annual banquet on Saturday evening.

Several doctors have already reserved rooms at other hotels in White Sulphur Springs and Lewisburg, and we are told that doctors located in nearby areas are planning to return home each evening so that the available accommodations may be taken by those who live some distance from White Sulphur.

We urge every member of the West Virginia State Medical Association and Auxiliary to make every possible effort to attend the meeting. Its value to the doctor, as well as to his wife, cannot be stressed too strongly. It is the one time during the year when members of our strong organization have the opportunity to meet with confreres from practicaly every part of the state. Every doctor should attend the meeting, even if but for a day.

HENRY JOHNSON

Members of the West Virginia State Medical Association who were acquainted with Henry S. Johnson, of Richomnd, executive secretary of the Medical Society of Virginia, will be grieved to hear of his death in that city on May 23, 1951. Death was due to coronary thrombosis.

Although Mr. Johnson, who had been a welcome visitor to Charleston, White Sulphur Springs, and other cities in West Virginia, had suffered previous coronary attacks, he had apparently fully recovered, and his death on May 23 came as a distinct shock to the doctors in Virginia and West Virginia who knew him so well.

Mr. Johnson was named director of public relations of the Virginia Society in March, 1946, and was elevated to the office of secretary-treasurer in 1950 upon the retirement of the secretary, Miss Agnes Edwards.

On behalf of the doctors in this state who were fortunate in knowing Henry Johnson, we extend deepest sympathy to his widow, the former, Lucy Bralley, who for the present will continue in a secretarial capacity with the Medical Society of Virginia.

THE WORLD MEDICAL ASSOCIATION

The ominous shadow of Communism, lowering over the entire globe, threatens not only World War III, but even the destruction of civilization itself. Einstein spoke only too truthfully when he said he could not predict the weapons to be used in the Third World War, but that in the Fourth, the combatants would use rocks. If we are ever to achieve word peace, the major forces in the accomplishment of that end, so devoutly to be wished, will be Christianity and medicine. Fortunately Christianity is becoming a little more closely integrated and the Master's philosophy, as quoted by the physician Luke, "As ye would that men should do unto you, do ye also to them likewise," is all too slowly becoming a little better—a very little better—understood, even if not better practiced.

Medicine is a cohesive and a constructive force for good, for the betterment of humanity and for the improvement of the way of life. It knows no national boundary lines and seeks only the betterment of mankind. In recognition of these basic facts the World Medical Association was formed as a part of the effort to bring order out of the chaos wrought by World War II. We, as members of a beneficent profession, owe it to ourselves and to civilization to support the organization which promises as much as any other one force to inculcate the principles of peace and human betterment in a distracted world now grouping in darkness not knowing just what to do next.

Medicine is a unifying force, and it behooves as many of us as can to become members of the World Medical Association, which has a definite program for world medicine and world betterment. A booth at the White Suphur meeting will be available for more information and applications for membership. We bespeak for this world organization of physicians the earnest support of the profession in West Virginia.

WE WONDER

We have been informed that Mr. Oscar Ewing recently addressed two groups in California explaining some of the Washington plans, but failed to mention compulsory health insurance in either talk. We wonder whether he is actually becoming converted or whether he has read Mr. Dooley's classic statement about the Supreme Court following the election returns.

GENERAL NEWS

PLANS COMPLETED FOR 84TH ANNUAL MEETING AT WHITE SULPHUR SPRINGS

Advance information previously published concerning the splendid program being arranged for the 84th annual meeting of the West Virginia State Medical Association has undoubtedly affected favorably applications for reservations at the Greenbrier. Never before has there been such a heavy advance reservation of rooms. As this news story is being written (July 20), rooms for a total of 624 doctors, their wives, and guests have been reserved. There is hardly any doubt that the Greenbrier will be a sell-out for the convention.

The program was completed the middle of June, and is printed in detail in this issue of the Journal. The general sessions are scheduled for mornings, and all section and affiliated society and association meetings will be held afternoons. Exceptionally interesting programs have been arranged for the afternoon meetings, and doctors who are present will have the opportunity of attending meetings both morning and afternoon which will be addressed by leading medical authorities from over the country.

Registration Opens July 18

The registration booth, which will be located just outside the entrance to the auditorium at the Greenbrier, will be opened Wednesday afternoon, July 18, at three o'clock and will remain open each day throughout the meeting. There will be no registration fee.

Frank J. Holroyd, M. D.

Pre-Convention Meeting of Council

The pre-convention meeting of the Council is scheduled for four o'clock on Wednesday, and the members face another heavy agenda.

The convention will be officially opened Thursday morning, July 19, at nine o'clock, with Dr. Frank J. Holroyd, of Princeton, president of the State Medical Association, in the chair. The first address is scheduled for 9:05 o'clock. Dr. Arnold S. Jackson, Director of the Jackson Clinic at Madison, Wisconsin, will speak on the subject of "Cysts and Tumors of the Neck." The scientific sessions will close Saturday at noon, with an address by Dr. Frank E. Adair, associate professor of clinical medicine, Cornell University Medical School, New York City, whose subject will be, "Hormone Therapy in Cancer of the Breast."

The general sessions on Thursday and Friday will begin promptly at nine o'clock. The Saturday morning session is scheduled to begin at ten o'clock.

Moderators Named

The members of the program committee will serve as moderators at the three general sessions. Dr. James L. Wade, of Parkersburg, will have charge of the session on Thursday, July 19, and Dr. Cecil O. Post, of Clarksburg, will be in charge of the Friday morning session. Dr. L. J. Pace, of Princeton, chairman of the committee, will serve as moderator at the session on Saturday morning.

The speakers at the general sessions will be introduced, for the most part, by the heads of sections and affiliated societies and associations. The afternoon meetings will be in charge of the various sections and society groups.

Presidential Address July 19

Dr. Frank J. Holroyd will present his Presidential Address on Thursday evening at an open meeting at nine o'clock. His subject will be "Prophylaxis of Ewingism."

Dr. A. R. Sidell, of Williamstown, first vice president, will preside at the meeting, and the "President's Charm" will be presented to Doctor Holroyd at that time by Dr. Charles E. Watkins, of Oak Hill, chairman of the Council.

Mrs. Ross P. Daniel, of Beckley, president of the State Auxiliary, and Mrs. Harold F. Wahlquist, of Minneapolis, Minnesota, president of the AMA Auxiliary, will also speak at this meeting.

AMA President Guest Speaker Friday

Dr. John W. Cline, of San Francisco, president of the American Medical Association, will address an open meeting in the auditorium Friday evening, at nine o'clock. He was installed as president at the 100th annual meeting in Atlantic City, June 4-8. This will be his official visit to the State Medical Association. He has chosen as the subject of his address, "The Problems Facing American Medicine in the Immediate Future." Dr. Frank J. Holroyd will preside at this second open meeting.

John W. Cline, M. D.

House of Delegates To Meet

The first session of the House of Delegates will get under way Thursday afternoon, July 19, at four o'clock, and the second session is scheduled for the following afternoon at 3:30 o'clock. Officers will be elected at the second session. Doctor Holroyd, the president, will preside at both sessions of the House.

ACS Schedules Meeting

A special meeting of the West Virginia Chapter of the American College of Surgeons will be held in the auditorium Thursday afternoon immediately after the House adjourns.

MCV Alumni Dinner

The annual Medical College of Virginia alumni dinner will be held Thursday evening, at seven o'clock, and will be preceded by a social hour. The guest speaker will be Dr. Harry Hudnall Ware, Jr., of Richmond, professor of obstetrics at the Medical College of Virginia, and president elect of the Alumni Association. Dr. James L. Patterson, of Logan, president of the West Virginia chapter, will preside.

Banquet Saturday Evening

Plans for an elaborate banquet are now being completed by the program committee, and full information concerning this popular closing event of state meetings will be made public early in July. It is now known that it will be necessary to use the two dining rooms

and the corridor outside for the banquet, and the seating arrangement will be practically the same as used at the banquet in 1950.

Golf and Tennis Tournaments

Play in the annual golf and tennis tournaments will be limited to afternoons of the meeting. The swimming pool will be open each day and there will probably be dancing each evening. Good riding horses will be available at all times for use on the miles of trails within the Greenbrier grounds.

Reservations already made indicate that most of the doctors and their wives are arriving at the Greenbrier on July 18 and remaining until Sunday, July 22.

HEALTH CONFERENCE PAPERS AVAILABLE

Copies of the papers presented at the general sessions of the recent State Health Conference in Huntington have been mimeographed and will be supplied upon request addressed to the Bureau of Public Health Education, State Health Department, Charleston 5, West Virginia. The papers mimeographed are as follows:

"Introduction to an Understanding of Atomic Energy."—C. D. Thomas, Ph. D., Professor, Department of Physics, West Virginia University, Morgantown.

"Public Health Aspects of Atomic Warfare."—A. L. Chapman, M. D., Medical Director, Region III, U. S. Public Health Service, Washington, D. C.

"The Non-Medical Health Administrator in Local Units."—S. J. Axelrod, M. D., University of Michigan School of Public Health, Ann Arbor.

"The Indigent Medical Service Program in a County Health Unit."—Mark V. Ziegler, M. D., Chief, Bureau of Medical Services, Maryland State Department of Health, Baltimore, Maryland.

"Present Trends in Public Health."—E. G. McGavran, M. D., Dean, School of Public Health, University of North Carolina, Chapel Hill, North Carolina.

HEART ASSOCIATION TO MEET IN MORGANTOWN

The annual meeting and scientific session of the West Virginia Heart Association will be held at the Hotel Morgan, in Morgantown, Friday, October 5, 1951. An interesting program is being arranged for the meeting. The West Virginia-Washington and Lee football game is scheduled for Morgantown on Saturday, Octboer 6, and the Heart Association has expressed its willingness to obtain seats for members who expect to be present. All applications for tickets should be mailed to the West Virginia Heart Association, Box 2251, Charleston.

NEW PH QUARTERLY

A new quarterly publication, sponsored by the bureau of mental health of the state department of health, will make its debut with the issue for Summer, 1951. The publication will be known as "The Psychiatric Bulletin," and will be circulated throughout the state to doctors, libraries, hospitals, industrial plants, and county and district health department.

The initial issue, which will be distributed in July, will include several articles on the various phases of mental health.

MRS. JOHN F. McCUSKEY TO BE INSTALLED AS HEAD OF THE WOMAN'S AUXILIARY

Mrs. John F. McCuskey, of Clarksburg, will be installed as president of the Woman's Auxiliary to the West Virginia State Medical Association at the 27th annual meeting at the Greenbrier, in White Sulphur Springs, July 19-21. Mrs. McCuskey, who was named president elect in 1950, will succeed Mrs. Ross P. Daniel, of Beckley, who has served during the past year.

Mrs. McCuskey and all other elective officers will be installed on Saturday, July 19, by Mrs. Harold F. Wahlquist, of Minneapolis, Minnesota, president of the Woman's Auxiliary to the American Medical Association.

Registration of members will open Thursday, July 19, at noon, at the Greenbrier, and the pre-convention meeting of the executive board is scheduled for four o'clock, with Mrs. Daniel presiding.

The past president's breakfast will be held in a private dining room at eight o'clock Friday morning, and the formal opening is scheduled for nine-thirty o'clock, with Mrs. Daniel in the chair.

That afternoon at one o'clock a luncheon will be held in honor of Dr. John W. Cline, of San Francisco, president of the American Medical Association, and all past presidents of the State Auxiliary.

Other honor guests will include presidents of Ohio and Pennsylvania Auxiliaries; Mrs. L. S. Thompson, Dallas, Texas, president of the Woman's Auxiliary to the Southern Medical Association; Mrs. V. E. Holcombe, of Charleston, president elect of Southern

Mrs. Ross P. Daniel

Medical; Dr. Frank J. Holroyd, president of the State Medical Association, and Mrs. Holroyd; and Drs. Charles L. Goodhand, Robert J. Reed, Jr., William A. Thornhill, Jr., Ross P. Daniel, and S. Elizabeth McFetridge, members of the advisory committee to the executive board.

Mrs. C. A. Smith, of Beckley, will preside at the luncheon, guests will be welcomed by Mrs. Ross P. Daniel, of Beckley, and the invocation will be given by Mrs. U. G. McClure, of Charleston.

Mrs. Wahlquist has been a member of the board of directors of the Woman's Auxiliary to the American Medical Association for the past 10 years. She was chairman of the finance committee for two years, 1941 to 1943, and treasurer for four years, 1943 to 1947. In 1947-48 she served as chairman of public relations; in 1949-50, as first vice president; and in June, 1950, was named president elect. She was installed as president of the Auxiliary at the annual meeting in Atlantic City in June, 1951.

Mrs. E. Wyatt Payne, of Huntington, will be the guest speaker. Her subject will be, "Socialized Prescriptions for Americans."

New officers will be elected at the session on Saturday morning, July 21, and reports of county presidents will be received at that time. The formal business meeting will be closed with the inaugural address of the new president, Mrs. John F. McCuskey.

A luncheon in honor of Mrs. Harold F. Wahlquist, of Minneapolis, Minnesota, president of the AMA Auxiliary, and Mrs. John F. McCuskey, of Clarksburg, the new state president, is scheduled for Saturday afternoon at one o'clock. The guest speaker will be Mrs. Wahlquist.

Mrs. Harold F. Wahlquist

The post-convention meeting of the board will be held Saturday afternoon, at three o'clock, with Mrs. McCuskey presiding.

Entertainment provided by the Auxiliary for members and their husbands will include dancing, bridge, and Canasta. Members will attend the annual banquet Saturday evening.

MEDICAL-DENTAL BUREAUS AID AMA FUND

The National Association of Medical-Dental Bureaus, of which the four Bureaus located at Beckley, Charleston, Huntington and Wheeling are members, are preparing to participate actively in the AMA National Education Campaign Fund. Each member of the national association is being asked to contribute $10.00 or more to the Fund.

According to the May issue of the Bureaugram, official organ of the Association, it is planned that solicitation of funds is to be completed prior to the annual meeting in Milwaukee, so that a check for the total proceeds raised may be presented to a representative of the AMA at that time.

In an editorial in the Bureaugram, the president of the Association is quoted as saying that this is an excellent project, not only a worthy cause for an organization of this kind in which to participate, but another way of showing county medical societies and the American Medical Association that the members of the Association are in sympathy with the program and willing to do some work in its behalf.

W. H. Hagedorn, co-owner with M. O. Bobes, of the Wheeling Bureau, is a member of the committee in charge of the campaign.

The advertisement of the West Virginia Bureaus, appearing currently in the West Virginia Medical Journal, is reproduced on the back page of the May issue of the Bureaugram. The caption is headed "Ads of Distinction," and it is stated that the copy presents an excellent idea for members in other states to share the cost of an ad in their state society journals.

RELOCATIONS

Dr. Thomas B. Baer, of Huntington, has moved to Bluefield where he will serve as chief urologist at the Bluefield Sanitarium.

* * * *

Dr. Eric W. Walter, of Quinwood, has relocated at Bismarck, North Dakota, where he will continue in general practice, with offices at 1012 Twelfth Street.

* * * *

Dr. Ralph Frazier, of War, has moved to Logan, where he is serving as a member of the staff of Mercy Hospital in that city.

* * * *

Dr. Stephen Mamick, of White Sulphur Springs, has accepted a three-year residency at St. Luke's Hospital, in Chicago.

* * * *

Dr. Sam I. Sato, of Slab Fork, has accepted a three-year preceptorship in dermatology at the City and University Hospitals in Cleveland, Ohio. He expects to move to Cleveland the first of July.

GOLF AND TENNIS TOURNAMENTS TO BE HELD DURING ANNUAL MEETING

Many valuable trophies will be awarded participants in the annual medical golf tournament to be held at the Greenbrier during the 84th annual meeting of the West Virginia State Medical Association.

The championship trophy offered by Kloman Instrument Company will be awarded the winner of the tournament. Last year the trophy was won by Dr. Charles E. Watkins, of Oak Hill, who had previously won the first trophy offered by the Kloman Company.

The championship plaque, offered by the West Virginia State Medical Association, will also be awarded at the end of the tournament. Other prizes include a golf bag, offered by Van Pelt & Brown, Richmond, for low net; a National otoscope, Medical Arts Supply Company, Huntington, for low putts; pigskin bag, Powers & Anderson, Richmond, for blind bogey; penicillin case, Wyeth, Inc., for most fives; and leather bag, Max Wocher & Sons Company, Cincinnati, for most sixes. Only one prize will be awarded to a participant.

There will be a 6-hole blind handicap, with entry fee of $1.00. Each member may enter as many times as he plays during the meeting, the fee being $1.00 for each day's play. Prizes will be merchandise purchased from the Greenbrier Golf Shop.

Play will be limited to afternoons during the meeting. Courses Nos. 1 and 3 will be used. The starter on No. 1 Tee must be notified when the participant starts to play for tournament round. It is not necessary that players furnish club handicaps. All putts must be dropped and the number recorded on the play card.

The golf committee, which has completed arrangements for the tournament, is composed of Dr. James S. Klumpp, of Huntington, chairman, and Drs. R. R. Summers, Charleston, and J. I. Markell. Princeton.

Tennis Tournament Set

Plans have also been completed for the annual medical tennis tournament to be held during the convention. The committee in charge is composed of Dr. Robert M. Biddle, of Parkersburg, chairman, and Drs. John E. Lutz and S. L. Bivens, of Charleston.

Tournament play will be limited to afternoons of the meeting. Valuable awards will be made by the committee, including the championship cup offered by Kloman Instrument Company, of Charleston. Many valuable prizes have been offered by other individuals and companies, and all participants are assured of a prize.

Those who expect to engage in tournament play at the Greenbrier should notify one of the members of the committee before play is started Thursday afternoon, July 18.

DR. GEORGE F. EVANS RENAMED TO MLB

Dr. George F. Evans, of Clarksburg, has been renamed by Governor Okey L. Patteson, as a member of the medical licensing board for the term ending June 30, 1956. Doctor Evans has been a member of the board since its creation by the Legislature in 1949.

ATTORNEY GENERAL HOLDS PRACTICE OF D. O's. LIMITED TO FIELD OF OSTEOPATHY

The attorney general of West Virginia, on June 18, handed down an opinion that affects practice in West Virginia by osteopathic physicians and surgeons. In the opinion, which was written by T. D. Kauffelt, assistant attorney general, it was held that "osteopathic physicians and surgeons are entitled to the same rights and privileges as doctors of medicine in the treatment of cases only to the extent that their treatment remains within the field of osteopathy as defined by the legislature." The opinion ends with the statement that such treatment "is generally considered to exclude the administration of drugs and operative surgery."

The matter was officially laid before the attorney general by Dr. N. H. Dyer, state director of health, acting at the direction and on behalf of the state board of health and the medical licensing board. These two state agencies had previously been requested by the Council of the West Virginia State Medical Association to seek an opinion from the attorney general concerning the legality of practice by osteopathic physicians of the same type of medicine and surgery now practiced by doctors of medicine.

A copy of the opinion handed down by the attorney general is included in a letter addressed to Dr. N. H. Dyer under date of June 18, 1951. The letter, with the opinion, follows:

STATE OF WEST VIRGINIA
OFFICE OF THE ATTORNEY GENERAL
CHARLESTON 5

WILLIAM C. MARLAND
Attorney General

June 18, 1951

Honorable N. H. Dyer
Commissioner
State Department of Health
Charleston 5, West Virginia

Dear Doctor Dyer:

We have your communications of recent date in which you inquire whether, in the light of Chapter 30, Article 14 of the Code of West Virginia, passed March 5, 1951, relating to the licensing of osteopathic physicians and surgeons, osteopathic physicians and surgeons may disperse drugs and perform surgery to the same extent as one possessing the degree of doctor of medicine and authorized by the laws of this state to practice medicine and surgery.

Chapter 30, Article 14 of the Code of West Virginia establishes a Board of Osteopathy, establishes the qualifications of osteopathic physicians and surgeons, and provides for the examination and licensing of osteopathic physicians and surgeons. Further, Section 9 reads as follows:

"*Osteopathic physicians and surgeons licensed hereunder shall have the same rights and privileges as physicians and surgeons of other schools of medicine.*

"Osteopathic physicians and surgeons shall observe and be subject to all state and municipal regulations relative to reporting births and deaths and all matters pertaining to the public health with equal rights and obligations as physicians of other schools of medicine, and such reports shall be accepted by the officers of the department to which the same are made.

"*Osteopathic physicians and surgeons licensed hereunder shall have the same rights and privileges as physicians and surgeons of other schools*

of medicine with respect to the treatment of cases or the holding of health offices or offices in public institutions." (Italics ours.)

A statute is construed only to establish the intent of the legislature, and in order to establish the intent the whole act should be looked to, rather than any specific provision thereof. Our Supreme Court of Appeals said in *State ex rel. Holbert* v. *Robinson*, 59 S. E. 2d 884, Syl. 1:

"A statute is enacted as a whole with a general purpose and intent, and each part should be considered in connection with every other part to produce a harmonious whole. Words and clauses should be given a meaning which harmonizes with the subject matter and the general purpose of the statute. The general intention is the key to the whole and the interpretation of the whole controls the interpretation of its parts."

The article in question refers throughout to the practice of medicine and surgery *as an osteopathic* physician and surgeon, and section two thereof defines osteopathy as follows:

"For the purposes of this article:
" 'Osteopathy' shall mean that system of the healing art which places the chief emphasis on the structural integrity of the body mechanism as being the most important single factor in maintaining the well-being of the organism in health and disease; * * *"

The reference in the statute to the practice of medicine and surgery *as an osteopathic* physician and surgeon, and the definition of osteopathy, stated above, must be constantly kept in mind. It can be seen therefrom that the intent of the legislature was that osteopathic physicians and surgeons should practice only within the limits of osteopathy as defined by them.

The West Virginia Supreme Court of Appeals stated in *Hall et al.* v. *Baylous*, 109 W. Va. 1, Syl. 1, 153 S. E. 293, "Where the construction of a statute is involved in order to interpret the legislative intent, regard must be had to the subject matter of the statute, its scope, purpose, and effect." It can be clearly seen that the purpose of this statute is the regulation of osteopathy. The legislature did not attempt to do away with all distinction between the osteopathic physician and surgeon and physicians and surgeons possessing the degree of doctor of medicine. To the contrary this legislation emphasizes the intent of the legislature that the two schools of medicine and surgery are to be entirely distinct and each limited to its own field. The scope of this act is limited to osteopathy and should not be broadened to include other fields. A similar situation was considered in the case of *State ex rel. Beck, Atty. Gen.*, v. *Gleason* (Kan.), 79 P. 2d 911, 916, in which the court said:

"Since the enactment of these two statutes (Ch. 254, Laws 1901, and Ch. 290, Laws 1913), we have had two boards, composed of persons having different educational qualifications, issuing different types of certificates: (1) The board of medical registration and examination. This is composed of seven members, 'who shall have received the degree of doctor of medicine from some reputable medical college or university.' This board is authorized to issue certificates 'to practice medicine and surgery' in this state. (2) The board of osteopathic registration and examination. This is composed of five members reputable practitioners of osteopathy, graduates of a reputable school or college of osteopathy. This board is authorized to issue certificates 'to practice osteopathy' in this state. By these statutes, and subsequent amendments thereof, the legislature has clearly recognized a distinct difference between the 'practice of medicine and surgery' and the 'practice of osteopathy.' "

The Supreme Court of Nebraska, in the case of *State ex rel. Johnson, Atty. Gen.* v. *Wagner et al.*, 297 N. W. 906, 910, discussed the rights of osteopathic physicians and surgeons as follows:

"The argument is made that as general surgery, orthopedic surgery, anatomy, pathology and other subjects are included in the required course of study in an accredited school of osteopathy, their practice is included in the statutory authorization by virtue of the use of the words, 'The right to practice Osteopathy in all its branches, as taught in the Osteopathic colleges recognized by the American Osteopathic Association.' The words of this statute do not authorize a licensed osteopath to practice everything that he is taught in an osteopathic school. It contains expressions which have a limiting as well as an authorizing effect. The practice authorized must be osteopathic and it must also be as taught in accredited osteopathic colleges. The fact that branches of medicine and surgery may be taught to increase the knowledge of the student in the anatomy and functions of the various parts of the human body for the purpose of better fitting him to practice osteopathy will not warrant him to invade those fields on the theory that they constitute the practice of osteopathy. The scope of osteopathy is well known and schools and colleges of osteopathy must stay within its boundaries, they cannot enlarge them. People v. Fowler, 32 Cal. App. Supp. 2d 737, 84 P. 2d 326. * * *

"The argument is advanced that the use of the words 'osteopathic physician and surgeon' in the license implies the right to practice surgery. The word 'surgery' used in its general sense in connection with the profession of osteopathy means surgery by manual manipulation and was never meant to include operative surgery as we now understand it. The correctness of this statement is evidenced by the very principles of osteopathy to the effect that the general use of a knife or other instruments in surgical operations was regarded as unnecessary and opposed to the osteopathic system of treatment. The practice of osteopathy and operative surgery has long been recognized as two separate and distinct things. Separate boards have been set up in this state for the examination of those applying for licenses to practice medicine and surgery and those desiring to practice osteopathy. * * *"

The great weight of authority is to the effect that, unless authorized by statute, one practicing osteopathy cannot administer drugs or perform operative surgery. See Annotations in 86 A. L. R. 626. In *State* v. *Bonham*, 93 Wash. 489, 161 Pac. 377, L. R. A. 1917D, 996, the Washington Supreme Court held that a license to practice osteopathy does not confer the right to remove tonsils and give medicine in connection with the operation. In the case of *State* v. *Baker*, 48 S. E. 2d 61, 65, the Supreme Court of North Carolina said:

"It is reasonable to assume that the legislature comprehended the import of the words it employed to express its intent when it enacted the statues relating to osteopathy. There is no lack of clarity in the meaning of 'osteopathy' either in language or in law. It is the very antithesis of any science of medicine involving the use of drugs. Georgia Ass'n. of Osteopathic Physicians & Surgeons v. Allen, 5 Cir., 112 F. 2d 52. Dictionaries and Judicial decisions uniformly declare that osteopathy is a system of treating diseases of the human body without drugs or surgery. (Citing cases.) * * *"

It may be said that the wording of Section 9, quoted above, is plain and needs no construction, however, the meaning of the words must be construed in the light of the intent of the whole act. In Syl. 1 of *State* v. *Myers*, 74 W. Va. 488, our Supreme Court of Appeals said:

"In construing statutes the legislative intent is the controlling consideration, and to arrive at such intention it is sometimes necessary to exclude from the operation of a statute things included within its letter."

See also *State ex rel. Holbert* v. *Robinson, supra; State ex rel. McLaughlin* v. *Morris*, 128 W. Va. 456, 461, 37 S. E. 2d 85; *State ex rel., Lawhead* v. *County Court*, 129 W. Va. 167, 172, 38 S. E. 2d 897; Sutherland's Statutory Construction, Third Ed. Section 4704. This section should not be construed as allowing osteopathic physicians and surgeons to practice outside the field of osteopathy.

It is therefore our opinion that osteopathic physicians and surgeons are entitled to the same rights and privileges as doctors of medicine in the treatment of cases only to the extent that their treatment remains within the field of osteopathy as defined by the legislature, which treatment is generally considered to exclude the administration of drugs and operative surgery.

Very truly yours,

WILLIAM C. MARLAND
Attorney General
By (Signed) T. D. Kauffelt
Assistant

TDK:vh

The West Virginia State Medical Association has been endeavoring for several years to reach an agreement with the state osteopathic society on provisions of a bill creating a composite licensing board. Under a bill introduced in both houses during the last session of the legislature, osteopathic physicians would have been required to take the same examinations as doctors of medicine. Howeer, by a close vote in house and senate committees, the bill was not reported out.

The bill introduced on behalf of the osteopathic physicians, according them certain rights and privileges now exercised principally by regulations, was passed by the legislature late in the session.

WEST VIRGINIA CHAPTER ACS TO MEET

A special meeting of the West Virginia Chapter of the American College of Surgeons has been called for Thursday afternoon, July 19, 1951, at the Greenbrier, in White Sulphur Springs. The meeting will be held in the auditorium immediately following the first session of the House of Delegates.

Dr. William R. Laird, of Mongtomery, is Governor of the Chapter, and Dr. Hugh A. Bailey, of Charleston, the secretary.

DR. N. H. DYER AWARDED MPH

Dr. N. H. Dyer, of Charleston, State Director of Health, has completed his work at the University of Michigan School of Public Health and has been awarded the degree of Master of Public Health. He had most of his work in public health at Michigan before accepting appointment as state health commissioner in 1946.

AUTO EMBLEMS AVAILABLE

A new supply of auto emblems has been received at the headquarters offices of the West Virginia State Medical Association. There is a slight increase in price, the cost now being $3.25 each.

Emblems may be obtained by writing to the headquarters offices, Box 1031, Charleston 24, W. Va.

MEDICAL COLLEGE OF VIRGINIA AWARDS M. D. DEGREE TO 26 STATE STUDENTS

Commencement exercises were held at the Medical College of Virginia on June 5, 1951, marking the close of the one hundred and fourteenth session.

Degrees in medicine were awarded to 95 graduates, while 44 recevied a degree in dentistry, 51 in pharmacy, and 59 in nursing.

The honorary degree of doctor of science was conferred upon Dr. Claude C. Coleman, pioneer in neurosurgery. Doctor Coleman, professor of neurological surgery and chairman of the department, has resigned after forty-two years of service. He will continue as a consultant at the college. He is well known in medical circles in West Virginia, having appeared as a guest speaker several times at local and state meetings.

A total of 26 West Virginia students received their M. D. degree. Of the total, 22 were transfers from the two-year School of Medicine at West Virginia University. According to Dr. E. J. Van Liere, the dean, this is the largest number of West Virginia transfers ever graduated from the Medical College of Virginia.

The following is a list of West Virginia graduates in medicine:

Ralph Harold Boone, Wheeling; John Fremont Bos, Buckhannon; James David Brown, Craigsville; Ralph Burton Burner, Philippi; David Sheffer Clark, Huntington.

Merle Burton Davis, Fairmont; Preston Caldwell Davis, Beckley; Calvin Hunter Frazier, Huntington; Emma Jane Freeman, Adrian; John David French, Bluefield.

John McClure Grubb, Charleston; Clarence Edwin Hicks, Spring Hill; William Dane Irvine, Lewisburg; Edward Paul Jones, Mill Creek; Elmer Francis McHugh, Morgantown.

Erma Jean Marra, Morgantown; Homer Delmar Martin, Montrose; Joseph Emory Mathias, Clarksburg; Pamela Ross Moore, Lewisburg; Wilmer Grey Oliphant, Mount Hope.

Earl Elmore Roles, Jr., Lillybrook; Robert Frederick Schnabel, Huntington; Paul Ernest Totten, Charleston; Albert Martin Valentine, Morgantown; Robert Frederick Willis, East Bank; and James Earl Wotring, Morgantown.

Miss Nora Spencer Hamner, a graduate of the school of nursing was awarded the degree of M. S. in nursing. The president, Dr. W. T. Sanger, announced that she is the first woman ever to receive an honorary degree from the Medical College of Virginia.

SYMPOSIUM ON PEPTIC ULCER

A symposium on peptic ulcer, sponsored by Kanawha Medical Society, will be held at the Daniel Boone Hotel, in Charleston, October 3, 1951. The meeting is scheduled to open at 1:30 P.M., and adjourn by nine o'clock.

The program will be presented by Drs. Keith S. Grimson, Robert J. Reeves, Wayne R. Rundles and James P. Hendrix, all of Duke University School of Medicine.

There will be a registration fee of $5.00, including dinner which will be served at 6:30 o'clock. All interested physicians in West Virginia and adjoining states are invited to attend the meeting.

LARGE DELEGATION OF STATE DOCTORS AT AMA SESSIONS IN ATLANTIC CITY

The one hundredth annual meeting of the American Medical Association at Atlantic City was brought to a close Friday, June 15, after Dr. Louis H. Bauer, of Hempstead, New York, had been named president-elect. He will be installed as president at the 1952 annual meeting in Chicago.

Dr. John W. Cline, of San Francisco, was installed as president at a colorful evening meeting held in the immense auditorium on the Boardwalk, Tuesday evening, June 12. More than five thousand doctors, their wives and guests were present at this meeting. Doctor Cline's short address was broadcast over two networks.

He will be one of the principal speakers at the 84th annual meeting of the West Virginia State Medical Association at White Sulphur Springs. His address is scheduled for Friday evening, July 20.

The registration of doctors topped the 12,000 mark, one of the most largely attended sessions ever held.

Doctor Bauer has been chairman of the AMA Board of Trustees for the past two years. and is at present Secretary-General of the World Medical Association. He had previously served as chairman of the Council on Medical Service and had served several terms as a member of the AMA House of Delegates. He has been a member of the Board of Trustees since 1944.

Doctor Bauer's specialty is cardiology, and he is a consultant to several hospitals on Long Island, New York. He is a fellow of the American College of Physicians and a diplomate of the American Board of Internal Medicine. He has been editor-in-chief of the Journal of Aviation Medicine since 1930.

Other Officers Elected

Dr. Oscar B. Hunter, of Washington, D. C., was named vice president, and Dr. George F. Lull, of Chicago. was reelected as secretary and general manager. Dr. J. J. Moore, of Chicago, was renamed treasurer, and Dr. F. F. Borzell, of Philadelphia, was elected for another term as speaker of the House of Delegates. Dr. James R. Reuling, of Bay Side, New York, was renamed vice speaker.

Dr. Walter B. Martin, of Norfolk, Virginia, was reelected to a five-year term on the AMA Board of Trustees, and Dr. David B. Allman, of Atlantic City, was elected to serve the unexpired term of Dr. Louis H. Bauer.

Clinical Session at Los Angeles

The 1951 clinical session was officially transfered from Houston, Texas, to Los Angeles. The meeting is scheduled for December 4-7. The regular annual meeting will be held in Chicago in 1952, New York 1953, and San Francisco 1954. The 1952 clinical session is scheduled for Denver, Colorado.

Sessions of the House of Delegates were held on June 12-13-14. with 200 of the 201 delegates in their seats. Dr. Walter E. Vest, of Huntington, and Dr. George F. Evans, of Clarksburg, West Virginia delegates, were both present. Doctor Vest served as chairman of the Reference Committee on Rules and Order of Business. He is also a member of the executive committee of the Section on Diseases of the Chest. The late Dr. James R. Bloss, of Huntington, was a member of the executive committee of the Section on Obstetrics and Gynecology.

AMA Dues Remain at $25

AMA membership dues remain at $25.00 per annum. Action on the proposal to eliminate the classification of Fellowship in the AMA was postponed and will be considered at the clinical session in Los Angeles.

Dues will be waived for members who have retired from practice, provided they are excused from the payment of state dues. However, members over seventy years of age, regardless of whether they are in practice, and also regardless of local dues exemption, will not have to pay dues after this year. Payment of dues will continue to be waived for members for whom the payment of such dues constitute a financial hardship. Dues will also be waived for interns and residents for not more than five years after graduation from medical school, "except that time spent in military service may be excluded in calculating the five-year limit."

As in the past, members who enter military service prior to July 1 of any year will be exempt from the payment of one half year's dues, and subsequently the payment of all dues during their service in our armed forces.

New Section Created

A new Section on Military Medicine was created, but the House of Delegates declined to approve the establishment of a Section on Public Relations because such a section would not come within the scope of "scientific medicine."

A Hospital Standardization Committee was appointed to consist of members of the American Medical Association, the American College of Physicians, the American College of Surgeons, and the American Hospital Association.

It is proposed for the new committee to set up standards of accreditation, for hospitals, as well as actually accrediting hospitals.

The House also approved federal aid to medical schools for "construction only," and "in one package only." It joined the Sons of the American Revolution in demanding an investigation by Congress of education relative to the teaching of collectivism through text books, and by actual instruction by teachers in schools supported by public funds.

Whitaker and Baxter Retained

The House voted to retain the services of Whitaker & Baxter in a consulting capacity and renamed the coordinating committee, which is headed by Dr. Elmer L. Henderson, immediate past president.

The House approved resolutions limiting executive sessions to a discussion of the "internal affairs" of the Association; establishing a permanent reference com-

mittee on emergency medical service; and urging continued effort to extend prepaid medical insurance plans.

Seventy State Doctors Attend

A total of 70 West Virginia doctors had registered at the meeting through Thursday, June 14. The list follows:

Henry M. Brown. Belle; D. L. Hosmer and Harold E. Troup, Bluefield; Harold D. Almond, Buckhannon; T. Maxfield Barber, I. E. Buff, John E. Cannaday, W. L. Cooke, A. B. Curry Ellison, George P. Heffner. A. P. Hudgins, J. Dennis Kugel, Philip Preiser, and W. A. Thornhill, Charleston.

George F. Evans, Paul Gordon, John F. McCuskey, and Raymond J. Tille, Jr., Clarksburg; Richard V. Corton, Elkins; Claude L. Holland, L. Rush Lambert, and Delbert C. Smith, Fairmont; and Kyle Y. Swisher, Fairview.

Samuel J. Bucher, Harman; A. L. Starkey, Hopemont; Oscar B. Biern, Cole D. Genge, William B. Leftwich, Gilbert A. Ratcliff, Wilson P. Smith, Walter C. Swann, Walter E. Vest, and R. J. Wilkinson, Huntington.

R. D. Harman, Kingwood; Everett Starcher. Logan; R. O. Pletcher, Lost Creek; Albert M. Price, Madison; Max A. Forse, Charles Gruenwald, Jacob R. Jensen, William W. Johnston, Lloyd L. McCormack, M. O. Oates, Curtis G. Power, and Richard Talbott, Martinsburg.

R. Dewitt Peck and Clinton W. Stallard, Montgomery; George A. Curry, William H. Howell, and George R. Maxwell, Morgantown; and Charles E. Watkins, Oak Hill.

Richard W. Corbitt, S. William Goff, Athey R. Lutz, S. D. H. Wise, and A. C. Woofter, Parkersburg; Robert C. Lawson, Red Jacket; John E. Echols, Richwood; S. Elizabeth McFetridge and Halvard Wanger, Shepherdstown; and R. C. Newman, Spencer.

Johnson Chu and David C. Prickett, Weston; Francis J. Gaydosh, C. J. Holley, William M. Sheppe, R. A. Tomassene. and Howard G. Weiler, Wheeling; William T. Hall, White Sulphur Springs; and Frank J. Burian, Williamson.

PG COURSE IN CHEST DISEASES

The sixth annual postgraduate course in diseases of the chest, sponsored by the Council on Postgraduate Medical Education and the Illinois State Chapter of the American College of Chest Physicians, will be held at the St. Clair Hotel, in Chicago, September 24-28, 1951. Recent advancements in the diagnosis and treatment of chest diseases will be emphasized.

The course will be open to all physicians but the number of registrants will be limited. The tuition fee is $50.00, and applications will be accepted in the order in which they are received.

Applications should be mailed to the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

DOCTOR RANDOLPH RELEASED FROM SERVICE

Dr. Brady F. Randolph, Jr., of Morgantown, has been released from active service with the Armed Forces and has returned to practice in Morgantown. For the past several months he has been on active duty at the U. S. Army Hospital, Camp Gordon, Georgia, serving as Chief of Outpatients and Dispensary Service. He was released with the rank of Captain.

NEW MEMBERS OF STATE MEDICAL ASSOCIATION ELECTED SINCE JAN. 1

The following is a list, by component societies, of new members of the West Virginia State Medical Association, elected since the publication of the 1951 roster:

Barbaur-Randolph-Tucker

Jellinek, H. L. — Elkins
Martin, Harold E. — Elkins

Cabell

Birt, W. A. — Huntington
Greene, J. J. — Huntington
Hyer, Harry J. — Huntington
Wulfman, R. C. — Huntington

Central West Virginia

Hoylman, George T. — Gassaway

Fayette

German, R. M., Jr. — Oak Hill
Nichols, Sam I. — Burnwell
Stucky, W. F. — Winona
Wallace, G. C. — Ansted

Greenbrier Valley

Pittman, Robert R. — Cass
Walter, Eric W. — Bismarck, N. D.

Horrisan

Harrison, C. S. — Clarksburg

Kanawha

Kessel, J. S. — Clarksburg
Knapp, Thomas S. — Spencer
McCowen, Earl A. — Charleston

Marian

Hamilton, Robert B. — Fairmont
Lawson, C. S., Jr. — Barracksville
Mallamo, Franklin W. — Fairmont
Morgan, Jack C. — Fairmont

McDowell

Doboy, J. G. — Iaeger
Reneke, Edward J. — Jenkinjones
Walcott, William H. — Squire

Minga

Guthrie, William H. — Red Jacket
Knappenberger, William L. — Delbarton

Monangalia

Howell, W. H., Jr. — Morgantown

Ohia

Butler, Andrew K. — Wheeling

Parkersburg Academy

Gilmore, W. E. — Parkersburg
Whitaker, Charles F. — Parkersburg

Prestan

McLane, Robert A. — River Edge, N. J.

Summers

Johnson, Jesse T. — Hinton

Wetzel

Postlethwait, R. W. — New Martinsville

ALIDASE® IN SURGERY

Preoperative, Operative, Postoperative—

The complicating factors of venous thrombosis and "worn-out" veins have frequently made intravenous fluid administration a difficult and uncomfortable procedure.

The simplicity of subcutaneous fluid administration aided by Alidase (hyaluronidase) and the safety of this route make hypodermoclysis a valuable method for preoperative and postoperative fluid administration.

During surgery, Alidase-facilitated hypodermoclysis often offers the distinct advantage of permitting injection at a site remote from the surgical field and eliminates the cumbersome arm board. G. D. Searle & Co., Chicago 80, Illinois.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE SEARLE

3rd WORKING CONFERENCE ON SCHOOL HEALTH

The third Annual Working Conference on School Health will be held at Jackson's Mill during the week of August 20. The Conference is sponsored by the state department of health, the state department of education, and West Virginia University.

Instruction will be stressed at the Conference this year. According to Dr. N. H. Dyer, State Director of Health, the program will be broken down into three broad areas, (a) general school health instruction, (b) nutrition instruction, and (c) safety instruction.

The Conference will not consist of lectures and panel discussions by experts, but will be strictly a working conference in which those who attend will have an opportunity to participate and present their problems for group assistance. Expert consultants on school health will be present in an advisory capacity.

The Arthritis and Rheumatism Foundation is offering research fellowships in the basic sciences related to arthritis. Fellowships will be granted at both the predoctoral and postdoctoral levels.

Application forms may be obtained by writing the Medical Director, Arthritis and Rheumatism Foundation, 535 Fifth Avenue, New York 17, N. Y.

Fruit juices are contraindicated in acute shock because of their high content of potassium salts with their toxic effect in this state.—W. S. R. in Detroit Medical News.

NEW YORK DOCTOR WINS "SCHERING AWARD"

Dr. S. I. Griboff, who is serving his internship at Mt. Sinai Hospital, New York City, has received the "Schering Award for 1950." He was a senior medical student at Syracuse University College of Medicine when he enrolled in the competition.

The award of $1,000.00 was presented to Doctor Griboff by Mr. Francis C. Brown, president of Schering Corporation. The title of his paper was "The Clinical Use of Steroid Hormones in Cancer."

The Schering Award is given annually for the best manuscript prepared on designated phases of endocrinology. Medical students of the United States and Canada are eligible for the contest. The majority of medical schools are represented by applicants.

DR. T. L. HARRIS RENAMED TO WVU BOARD

Dr. Thomas L. Harris, of Parkersburg, a past president of the West Virginia State Medical Association, has been renamed by Governor Okey L. Patteson as a member of the Board of Governors of West Virginia University for the nine-year term ending June 30, 1960. Doctor Harris has already served one full term as a member of the Board.

DOCTOR FOSNAUGH IN ARMY MEDICAL CORPS

Dr. Robert P. Fosnaugh, of Parkersburg, has accepted a commission as captain in the Medical Corps of the Army. He reported on June 20 for active duty at Fort George G. Meade, Maryland.

OFFICERS OF COMPONENT SOCIETIES

Society	President		Secretary		Meetings
Barbour-Randolph-Tucker	M. Semon Lilienfeld	Parsons	Donald R. Roberts	Elkins	3rd Thurs.
Boone	W. V. Wilkerson	Highcoal	Ray I. Frame	Madison	2nd Wed.
Brooke	Ralph McGraw	Follansbee	W. T. Booher	Wellsburg	
Cabell	L. B. Gang	Huntington	James A. Heckman	Huntington	2nd Thurs.
Central West Virginia	Worth B. Forman	Buckhannon	Theresa O. Snaith	Weston	Quarterly
Doddridge	R. S. White	West Union	A. Poole	West Union	
Eastern Panhandle	E. Andrew Zepp	Martinsburg	G. O. Martin	Martinsburg	Quarterly
Fayette	M. G. Hresan	Fayetteville	Thos. C. Sims	Fayetteville	2nd Tues.
Greenbrier Valley	R. M. Ferrell	Lewisburg	H. Chas. Ballou	White Sulphur Spgs.	2nd Wed.
Hancock	R. E. Flood	Cove Sta., Weirton	Eli Weller	Weirton	2nd Tues.
Harrison	R. T. Humphries	Clarksburg	L. D. Zinn	Clarksburg	1st Thurs.
Kanawha	Vernon L. Peterson	Charleston	Robert C. Bock	Charleston	2nd Tues.
Logan	Frank R. Jamison	Logan	A. M. French	Logan	2nd Wed.
Marion	J. D. Ramino	Fairmont	Geo. T. Evans	Fairmont	Last Tues.
Marshall	Don S. Benson	Moundsville	David L. Ealy	Moundsville	Semi-Ann.
Mason	(Vacancy)		C. Leonard Brown	Pt. Pleasant	
McDowell	R. O. Gale	Welch	R. E. Burger	Welch	2nd Wed.
Mercer	R. H. Fowlkes	Bluefield	Robt. S. Gatherum	Bluefield	3rd Mon.
Mingo	S. G. Zando	Williamson	E. T. Drake	Williamson	2nd Thurs.
Monongalia	Clark K. Sleeth	Morgantown	Maynard Pride	Morgantown	1st Tues.
Ohio	Charles D. Hershey	Wheeling	John M. Moore	Wheeling	4th Tues.
Parkersburg Academy	Charles L. Goodhand	Parkersburg	S. W. Goff	Parkersburg	1st Wed.
Potomac Valley	M. H. Maxwell	Moorefield	G. E. Hartle	Moorefield	2nd Wed.
Preston	DelRoy R. Davis	Kingwood	C. Y. Moser	Kingwood	1st Thurs.
Raleigh	Hugh S. Edwards	Beckley	Paul E. Vaughan	Beckley	3rd Tues.
Summers	W. L. Van Sant	Hinton	D. W. Ritter	Hinton	
Taylor	Herbert N. Shanes	Grafton	C. A. Haislip	Grafton	Last Thurs.
Wetzel	T. B. Gordon	New Martinsville	Terrell Coffield	New Martinsville	Monthly
Wyoming	B. W. Steele	Mullens	John H. Sproles	Itmann	Quarterly

WEST VIRGINIA STATE MEDICAL ASSOCIATION

302 Atlas Bldg., Charleston, W. Va.

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Second Vice President: J. C. HUFFMAN, Buckhannon
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WALTER E. VEST (1952), Huntington

A. M. A. Alternates:
JAMES L. WADE (1951), Parkersburg
PAT A. TUCKWILLER (1952), Charleston

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Revision of Constitution and By-Laws

Sobisca S. Hall, Clarksburg, Chairman; Walter E. Vest, Huntington; J. N. Jarrett, Oak Hill; R. A. Fawcett, Wheeling; and Donald R. Roberts, Elkins.

DPA Advisory

Hugh A. Bailey, Charleston, Chairman; H. M. Beddow, Charleston; and Marion L. White, Huntington.

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Thomas G. Reed, Charleston, Chairman; D. A. MacGregor, Wheeling; Frank V. Langfitt, Clarksburg; Ward Wylie, Mullens; Guy H. Michael, Parsons; and W. Fred Richmond, Beckley.

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Don S. Benson, Moundsville, Chairman; George T. Evans, Fairmont; W. M. Warman, Morgantown; Logan W. Hovis, Parkersburg; and J. H. Wolverton, Jr., Piedmont.

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John F. McCuskey, Clarksburg, and Paul L. McCuskey, Parkersburg, Co-Chairmen; E. Lyle Gage, Bluefield; William B. Rossman, Charleston; Clark K. Sleeth, Morgantown; Guy H. Michael, Parsons; L. Rush Lambert, Fairmont; James S. Klumpp, Huntington; Edward S. Phillips, Wheeling; and Elizabeth McFetridge, Shepherdstown.

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A. C. Chandler, Charleston, President; M. W. McGehee, Huntington, President Elect; J. K. Stewart, Wheeling, Second Vice President; Ben W. Bird, Jr., Princeton, Secretary; and Keith E. Gerchow, Morgantown, Treasurer.

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Scientific Assembly, W. Va. Heart Association

R. J. Condry, Elkins, President; James L. Wade, Parkersburg, Vice President; John S. Pearson, Huntington, Secretary; and Mr. R. E. Plott, Charleston, Treasurer.

West Virginia Ob. and Gyn. Society

Charles L. Goodhand, Parkersburg, President; Alfred M. Dearman, Parkersburg, Vice President; and Clarence H. Boso, Huntington, Secretary.

Association of Pathologists of W. Va.

Siegfried Werthammer, Huntington, President; and Melvin L. Hobbs, Morgantown, Secretary.

Photo by Cummings, White Sulphur Springs

Riding is one of the favorite sports at The Greenbrier, the celebrated White Sulphur Springs Resort in West Virginia. There are over 250 scenic miles of riding trails on the 7,000-acre estate high up in the heavily forested Alleghany Mountains. Here some casual "strollers" ramble up the path past the popular Casino Country Club.

CONVENTION PROGRAM

84th Annual Meeting

of the

West Virginia State Medical Association

THE GREENBRIER, WHITE SULPHUR SPRINGS

July 19-21, 1951

WEDNESDAY AFTERNOON
July 18

3:00—Registration at Auditorium, The Greenbrier.

4:00—Pre-convention meeting of the Council. Charles E. Watkins, M. D., *presiding.*

THURSDAY MORNING
July 19

Moderator: James L. Wade, M. D.

9:00—Call to Order—Frank J. Holroyd, M. D., President, West Virginia State Medical Association.

9:05—"Cysts and Tumors of the Neck."—Arnold S. Jackson, M. D., Director, Jackson Clinic, Madison, Wisconsin.

A review of the important diagnostic and therapeutic points concerning bronchial and thyroglossal cysts, of malignant and benign tumors, and of rare lesions such as Mikulicz's disease. (Lantern Slides.)

(R. J. Wilkinson, M. D., will introduce the speaker.)

9:55—"Common Orthopedic Problems Which Can be Managed in the Office of the General Practitioner."—H. R. McCarroll, M. D., Assistant Professor of Clinical Orthopedic Surgery, Washington University School of Medicine, St. Louis, Missouri.

Certain orthopedic problems are encountered each day by the physician in general practice, as well as by the orthopedist, which can be managed satisfactorily without the necessity of hospitalization. These include certain types of fractures and dislocations, as well as some of the more common mechanical and metabolic disturbances. An attempt will be made to review many of these problems and discuss briefly the type of office management which can be used.

(James L. Wade, M. D., will introduce the speaker.)

10:45—"Certain Aspects of Water and Electrolyte Balance."—George E. Burch, M. D., Professor and Chairman of the Department of Medicine, Tulane University School of Medicine, New Orleans, Louisiana.

Certain therapeutic principles in the management of water and electrolyte problems in patients will be discussed. The basis for the various procedures will be presented in a fashion to make readily understandable the reasons for the selection of various types of solutions and routes of administrations in the treatment of disturbances in water and electrolyte balance.

(R. J. Condry, M. D., will introduce the speaker.)

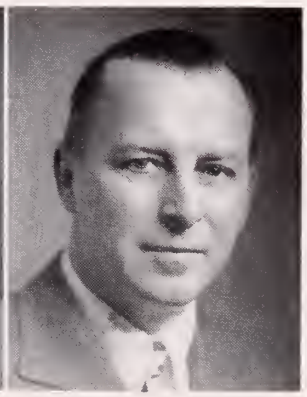
11:35—"Recent Trends in Anesthesiology."—Ralph M. Tovell, M. D., Chief, Department of Anesthe-

CONVENTION SPEAKERS

Arnold S. Jockson, M. D.

H. R. McCarroll, M. D.

George E. Burch, M. D.



Rolph M. Tovell, M. D.

siology, Hartford Hospital, Hartford, Connecticut.

Preventable pulmonary complications cause unwarranted morbidity and mortality. A plea will be made for more widespread employment of old and new procedures designed to prevent or alleviate pulmonary, cardiorenal and cerebral complications. Emphasis will be placed on indications for pharyngeal and tracheal toilet with saline and the employment of methods that may make tracheotomy unnecessary.

(Newman H. Newhouse, M. D., will introduce the speaker.)

THURSDAY AFTERNOON

Meetings of sections and affiliated societies:

1:45—Joint meeting, West Virginia Academy of General Practice and the Section on Pediatrics. Guest speaker, Alexis F. Hartmann, M. D., St. Louis, Missouri. Subject, "Recognition and Management of Serious Disturbances in Acid Base Balance." Donald R. Roberts, M. D., and A. M. Jones, M. D., *presiding.*

The principles of clinical and laboratory diagnosis of disturbances of water and acid-base balance will be reviewed, and the management of the more importat types will be illustrated, particularly from the point of view of the general practitioner. (Lantern Slides.)

2:00—Section on Surgery. Guest speaker, Arnold S. Jackson, M. D., Madison, Wisconsin. Subject, "The Treatment of Hyperthyroidism." T. Kerr Laird, M. D., *presiding.*

Conclusions based on a thirty-year study of the treatment of toxic goiter, with special emphasis on the indications for and against the use of iodine, the newer anti-thyroid drugs (propylthiouracil and tapazole), radioactive iodine, and thyroidectomy.

2:00—Section on Orthopedic Surgery. Guest speaker, H. R. McCarroll, M. D., St. Louis, Missouri. Subject, "Fractures of the Shaft of the Femur." Howard A. Swart, M. D., *presiding.*

The problem of fractures of the shaft of the femur will be covered in a general review. The manner of treatment will be discussed according to age and according to the type of fracture. It will also include the use of open reduction and internal fixation, the intramedullary nail, and the management of ununited fractures.

2:00—Scientific Assembly of the West Virginia Heart Association. Guest speaker, George E. Burch, M. D., New Orleans, Louisiana. Subject, "The Management of Congestive Heart Failure." James L. Wade, M. D., *presiding.*

The management of the average patient with advanced congestive heart failure will be discussed, including the use of digitalis, diuretics, diet and the general supportive measures.

2:00—West Virginia Society of Anesthesiologists. Guest speaker, Ralph M. Tovell, M. D., Hartford, Connecticut. Subject, "Vasoconstrictors and Spinal Anesthesia." Newman H. Newhouse, M. D., *presiding.*

Spinal anesthesia stands today at the crossroads. On the one hand it is subject to criticism in both the medical and lay press, and on the other hand it is being replaced by other methods. The use of vasoconstrictors either subcutaneously or intramuscularally has long been advocated. More recently they have been administered intradurally. Controversy has arisen regarding the efficacy of these agents irrespective of the route of administration. In this paper an attempt will be made to review the situation and to clarify concepts.

4:00—First Meeting, House of Delegates.

(A special meeting of the West Virginia Chapter of the American College of Surgeons will be held in the auditorium immediately after adjournment of the House of Delegates).

6:00—Social hour, Medical College of Virginia Alumni.

7:00—MCV Alumni Dinner. Guest speaker, Harry Hudnall Ware, Jr., M. D., Professor of Obstetrics, MCV, Richmond, Virginia. James L. Patterson, M. D., *presiding.*

THURSDAY EVENING

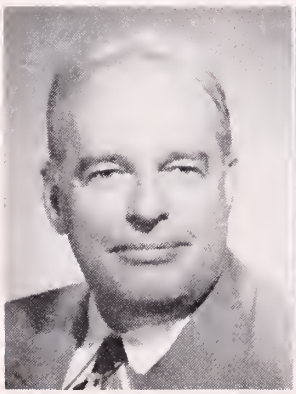
Presiding: A. R. Sidell, M. D.

9:00—Presidential Address.—Frank J. Holroyd, M. D. —"Prophylaxis of Ewingism."

Presentation of President's Charm.—Charles E. Watkins, M. D., Chairman of the Council.

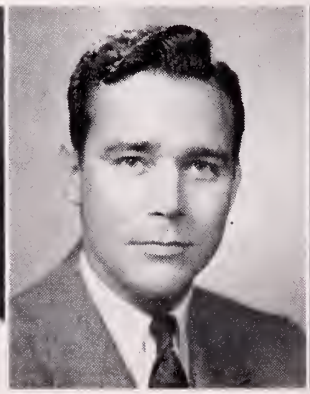
Introduction of Mrs. Ross P. Daniel, Beckley, President, Woman's Auxiliary to the West Virginia State Medical Association, and Mrs. Harold F. Wahlquist, Minneapolis, Minnesota, President, Woman's Auxiliary to the American Medical Association.

CONVENTION SPEAKERS



Alexis F. Hortmonn, M. D.

A. R. Colwell, M. D.



Stewort Wolf, M. D.

Oscor Swineford, M. D.

FRIDAY MORNING
July 20

Moderator: Cecil O. Post, M. D.

9:00—"Diagnosis and Treatment of Diabetic Acidosis." —A. R. Colwell, M. D., S. B., Irving S. Cutter Professor and Chairman, Department of Medicine, Northwestern University, Chicago, Illinois.

It is important to recognize diabetic acidosis and coma accurately and promptly. They are relatively easy to treat with dramatic results. Practical methods of diagnosis and management will be described in considerable detail.

(George P. Heffner, M. D. will introduce the speaker.)

9:50—"The Relation of Life Stress to Organic Disease."—Stewart Wolf, Jr., M. D., Assistant Professor of Medicine, Cornell University Medical College, New York City.

Experimental evidence that the time worn distinction between functional and organic disease is one of degree rather than kind and that the human body is capable of reacting with disease to the "slings and arrows of outrageous fortune" much as it is to real slings and arrows.

(William A. Thornhill, Jr., M. D., will introduce the speaker.)

10:40—"A Composite Picture of Hypertension."—Leroy H. Sloan, M. D., Clinical Professor of Medicine, University of Illinois College of Medicine, Chicago, Illinois.

Hypertension of itself not a diagnosis. Many conditions are associated with hypertension. This paper outlines some of the major causes of hypertension and deals with the differential diagnosis and the basic therapy.

(Paul H. Revercomb, M. D., will introduce the speaker.)

11:30—"The Role of the Practitioner in the Manage- of Asthma."—Oscar Swineford, Jr., M. D., Professor of Practice of Medicine, and in charge of Allergy-Arthritis Division of the Department of Internal Medicine, University of Virginia Department of Medicine, Charlottesville, Virginia.

Topics: Deficiencies in Allergy Instruction. Classification of Asthma: Atopic, Infectious, Cardiac, Reflex, Psychogenic, Bronchial Obstruction, Physical and Mixed. Use of Drugs: Anthines, Sympathomimetics, Expectorants, Sedatives, ACTH and Cortone. Management of Attacks and of Status Asthmaticus.

(Ben W. Bird, Jr., M. D., will introduce the speaker.)

FRIDAY AFTERNOON

Meeting of sections and affiliated societies:

1:30—Joint meeting, Section on Internal Medicine, West Virginia Diabetes Association, and the West Virginia Chapter of the American College of Physicians. Meeting in charge of William A. Thornhill, Jr., M. D., George P. Heffner, M. D., and Paul H. Revercomb, M. D.

Guest speakers: A. R. Colwell, M. D., Chicago; Stewart Wolf, Jr., M. D., New York City; and Leroy H. Sloan, M. D., Chicago.

2:00—West Virginia Academy of Ophthalmology and Otolaryngology. Guest speaker, Oscar Swineford, Jr., M. D., Charlottesville, Virginia. Subject, "The Use of ACTH and Cortisone in Ophthalmology and Otolaryngology." A. C. Chandler, M. D., *presiding*.

Topics: Nature of the Hormones. Physiological Effects, Immunological Effects, Undesirable Side Effects, Contraindications, Precautions to be Observed, Methods of Administration, Indications For and What to Expect From Their Use.

2:00—Association of Pathologists of West Virginia. Business meeting in charge of Siegfried Werthammer, M. D., President.

2:00—Annual meeting of West Virginia Radiologists. V. L. Peterson, M. D., *presiding*.

3:30—Second Meeting, House of Delegates.

FRIDAY EVENING

Presiding: Frank J. Holroyd, M. D.

9:00—"The Problems Facing American Medicine in the Immediate Future."—John W. Cline, M. D., San Francisco, California, President, American Medical Association.

CONVENTION SPEAKERS

J. A. C. Colston, M. D.

Emil Novak, M. D.

Frank E. Adair, M. D.

SATURDAY MORNING
July 21

Moderator: L. J. Pace, M. D.

10:00—"Infections of the Genito-Urinary Tract."—John A. Campbell Colston, M. D., Associate Professor of Urology, Johns Hopkins Medical School, Baltimore, Maryland.

A brief resume of the portals of entry of urinary tract infection is presented. The importance of a simple urological examination to eliminate obstructive factors, stone disease and other extraneous factors is discussed, and necessity of such simple diagnostic measures as excretion urography, determination of residual urine and examination of the prostate are stressed before any treatment should be undertaken in these cases. The various drugs available against urinary infections, especially the sulfa compounds and the various antibiotics, are discussed with special emphasis on their effects upon the various types of organisms found in urinary infections, upon their toxic effects and the dosage.

(Thomas G. Reed, M. D., will introduce the speaker.)

10:50—"The Problem of Primary Dysmenorrhea."—Emil Novak, M. D., Associate Professor Emeritus, Johns Hopkins Medical School, Baltimore, Maryland.

Comment on various concepts of etiology of dysmenorrhea, obstructive, psychogenic, endocrine. Discussion of endocrine connotations, especially relation of ovulation to primary dysmenorrhea. Management of dysmennorrhea, with accent on limitations of endocrine therapy. Presacral neurectomy often effective in severe cases, but indicated only when non-surgical measures inadequate.

(Charles L. Goodhand, M. D., will introduce the speaker.)

11:40—"Hormone Therapy in Cancer of the Breast."—Frank E. Adair, M. D., Associate Professor of Clinical Surgery, Cornell University Medical School, New York City.

(Thomas Bess, M. D., will introduce the speaker.)

SATURDAY AFTERNOON

1:30—West Virginia Obstetrical and Gynecological Society. Guest speaker, Emil Novak, M. D., Baltimore, Maryland. Subject, "Relation of the Ovarian Hormones to Female Genital Cancer." Charles L. Goodhand, M. D., *presiding.*

Study of carcinogenic effects of estrogen, a natural outgrowth of recognized growth effects of estrogen upon female genital tract and breast, which are normally under physiologic control of this hormone. Review of experimental production of cancer by estrogens in certain animals and tissue, but genetic factor can never be excluded. Although carcinoma of endometrium cannot be produced experimentally, a number of human cases have been attributed to estrogen abuse, and these are discussed, together with such correlated questions as predisposing role of postmenopausal hyperplasia, late menopause, possible hazards of therapy, etc.

1:30—Section on Urology. Guest speaker, John A. Campbell Colston, M. D., Baltimore, Maryland. Subject, "Papillary Tumors of the Renal Pelvis and Ureter with Special Reference to Operation on the Solitary Kidney, with Case Presentations." Thomas G. Reed, M.D., *presiding.*

A summary of the pathology of paillary tumors of the kidney and ureter with special reference to their growth, characteristics and method of extension is presented, the diagnostic criteria are discussed and the rationale of treatment outlined with illustrative cases. The advisability of operation upon a solitary kidney which is the site of a tumor is discussed, with presentation of two cases.

2:00—Cancer Committee, West Virginia State Medical Association. Guest speaker, Frank E. Adair, M. D., New York City. Subject, "The Influence of the American Cancer Society on Cancer Research in the United States." Thomas Bess, M. D., *presiding.*

SATURDAY EVENING

7:00—Annual Banquet.

KNOW THE SPEAKERS

(Biographical Sketches)

FRANK E. ADAIR, M. D., New York City; M. D. Johns Hopkins University School of Medicine, 1915; attending surgeon, Memorial Hospital, New York City, associate professor of clinical surgery, Cornell University Medical School; member of the National Advisory Cancer Council, USPHS; F. A. C. S.; and Honorary Fellow of the Royal College of Surgeons, England.

GEORGE E. BURCH, M. D.. New Orleans, Louisiana. born at Edgard, Louisiana; B. S., Tulane University; M. D. Tulane University of Louisiana School of Medicine, 1933; fellowship in cardiovascular research at Hospital of the Rockefeller Institute for Medical Research, 1939-41; professor and chairman, department of medicine, and director of courses in cardiovascular diseases at Tulane School of Medicine; head, division of medicine, Tulane Unit, Charity Hospital; certified by the American Board of Internal Medicine in internal medicine and subspecialty of cardiovascular diseases; Diplomate of the National Board of Medical Examiners; special consultant, USPHS, Cardiovascular Study Section, National Institute of Health; author "Primer of Venous Pressure," 1950; and co-author of "Primer of Electrocardiography" (with Winsor), second edition, 1949; and "Primer of Cardiology" (with Reaser), 1945.

JOHN W. CLINE, M. D., San Francisco, California; A. B. University of California, 1921; M. D. Harvard Medical School, 1925; F. A. C. S.; F. I. C. S. (Hon.); associate clinical professor of surgery, Stanford University School of Medicine; surgeon to Stanford, San Francisco, and Children's Hospital; secretary, California Division, American Cancer Society; author of several papers on surgical subjects and medical economics; Expert Medical Consultant in Surgery to the U. S. Air Force; installed as president of the American Medical Association in June, 1951.

J. A. CAMPBELL COLSTON, M. D., Baltimore, Maryland; Ph. B. Yale University, 1907; M. D. Johns Hopkins Medical School, 1911; associate professor of urology, Johns Hopkins Medical School; and editor of the Journal of Urology.

ARTHUR R. COLWELL, M. D., Evanston, Illinois; M. D. Rush Medical College, 1921; Irving S. Cutter Professor and Chairman, Department of Medicine, Northwestern University, Chicago; chairman, department of medicine, Passavant Memorial Hospital, Chicago; past president, Chicago Diabetes Association; president, American Diabetes Association.

ALEXIS F. HARTMANN, M. D., St. Louis, Missouri; B. S. 1919, and M. S. and M. D. 1921, Washington University School of Medicine, St. Louis; professor of pediatrics and head of the department, Washington University School of Medicine since 1936; physician-in-chief, St. Louis Children's Hospital; pediatrician-in-chief, St. Louis Maternity Hospital and Washington University Clinics; pediatric consultant at St. Louis City Hospital, St. Louis County Hospital, Homer G. Phillips Hospital, University of Missouri, and the Los Alamos Medical Center; certified by the American Board of Pediatrics, 1936; and author of numerous papers, chiefly concerning treatment of acidosis, alkalosis, dehydration, edema, and disturbances of carbohydrate metabolism.

ARNOLD S. JACKSON, M. D., Madison, Wisconsin; born in Madison; M. D. College of Physicians and Surgeons, Columbia University, 1919; M. S. in Surgery, University of Minnesota, 1922; member of Founders Group, American Board of Surgery; F. A. C. S.; F. I. C. S.; secretary, American Chapter, F. I. C. S.; president, Wisconsin Surgical Society; director of the Jackson Clinic; associate editor of the American Journal of Surgery; editor of the Jackson Clinic Bulletin; and author of "The Answer is . . . Your Nerves," "Goiter and Other Diseases of the Thyroid Gland," and other books.

HENRY R. McCARROLL, M. D., St. Louis, Missouri; born at Walnut Ridge, Arkansas; M. D. Washington University, St. Louis, Missouri, 1931; resident in surgery, Shriners' Hospital for Crippled Children, St. Louis, 1934-37; assistant surgeon, Shriners' Hospital, 1937-50; assistant professor, clinical orthopedic surgery, Washington University School of Medicine, St. Louis; and member of the orthopedic staff of Barnes, St. Louis Children's, St. Luke's, Deaconess, Robert Koch and Shriners' Hospital for Crippled Children, St. Louis, Missouri.

EMIL NOVAK, M. D., Baltimore, Maryland; M. D. Baltimore Medical College, 1904; assistant professor emeritus, Johns Hopkins Medical School; Gynecologist-in-chief and chief of the staff, Bon Secours Hospital; gynecologist-in-chief, St. Agnes Hospital; past president of the American Gynecological Society; Fellow of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons; Honorary Fellow of the Royal College of Obstetrics and Gynecology of Great Britain; author of four books pertaining to gynecology, including the "Textbook of Gynecology" and "Obstetrical and Gynecological Pathology."

LEROY H. SLOAN, M. D., Chicago, Illinois; M. D. Rush Medical College, 1917; clinical professor of Medicine, University of Illinois College of Medicine; formerly associate professor of medicine at Rush Medical College; director of medical service at Illinois Central Hospital; consulting Physician to Copley Hospital, Aurora, Illinois; Diplomate of the National Board of Medical Examiners; certified by the American Board of Internal Medicine; former Governor and Regent, and now first vice president of the American College of Physicians.

OSCAR SWINEFORD, JR., M. D.. Charlottesville, Virginia; born in Richmond, Virginia; early education at McGuire's University Preparatory School, Richmond; B. S. University of Virginia, 1923, and M. D.

University of Virginia Department of Medicine, 1926; former instructor in clinical pathology and acting associate professor of pathology, and now professor of the practice of medicine and in charge of allergy-arthritis division of the Department of Internal Medicine, University of Virginia Medical School; formerly president of Southeastern Allergy Association, and American Academy of Allergy, and member of the board of directors of the American Allergy Foundation.

RALPH M. TOVELL, M. D., Hartford, Connecticut; M. D. Queen's University Faculty of Medicine. Kingston, Ontario, 1926; chief, department of anesthesiology, Hartford Hospital, Hartford, Connecticut; lecturer in anesthesiology, Yale University School of Medicine; consultant and chairman of the Board of Chief Consultants in Anesthesiology to the Central Office, Veterans Administration, Washington. D. C.; and during World War II, senior consultant in anesthesiology in the European Theater of Operations, United States Army.

STEWART WOLF, JR., M. D., New York, New York; born in Baltimore, Maryland; attended Friend's school, Baltimore, Ecole Allsacienne, Paris, France, Phillips Academy, Andover, and Yale; A. B. and M. D. Johns Hopkins; served with the 9th General Hospital, the affiliated unit of Cornell University Medical College, in Australia, New Guinea, and the Philippines during World War II; assistant professor at Cornell University Medical College, 1946, and associate professor, 1949; clinical associate neuropsychiatrist at Bellevue Hospital, 1949; in charge of Medicine A, psychosomatic clinic of the department of medicine at Cornell-New York Hospital, engaging in research in pain, gastrointestinal physiology and psychosomatic mechanisms; recipient, Award of the American Gastroenterological Association for Distinquished Research in Gastroenterology, 1943; co-author of "Human Gastric Function," a monograph first published in 1943 dealing with the detailed study of a man with a hole in his stomach, a modern Alexis St. Martin, and co-author of three other monographs, "Pain," "The Nose," and "The Human Colon."

DELEGATES AND ALTERNATES

B-R-T (3)—Delegates, Donald R. Roberts, Elkins, Hu C. Myers, Philippi, and Guy H. Michael, Parsons. Alternates, J. R. Woodford, Philippi, Robert E. Smith, Parsons, and Charles L. Leonard, Elkins.

BOONE (2)—Delegates, Ray I. Frame and A. M. Price, Madison. Alternates, Wyson Curry, Jr., Madison, and P. J. Novey, Nellis.

BROOKE (1)—Delegate, W. T. Booher, Wellsburg. Alternate, J. P. McMullen, Wellsburg.

Cabell (7)—Delegates, James A. Heckman, C. Stafford Clay, H. E. Beard, Francis L. Coffey, C. A. Hoffman, Howard R. Crews, and Marion L. White, Huntington. Alternates, J. J. Brandabur, John E. Stone, R. M. Wylie, Chauncey B. Wright, William B. MacCracken, R. J. Stevens, and Lee F. Dobbs, Huntington.

CENTRAL WEST VIRGINIA (3)—Delegates, Theresa O. Snaith, Weston, R. L. Chamberlain, Buckhannon, and James R. Glasscock, Richwood. Alternates, E. L. Fisher and W. W. Huffman, Gassaway, and O. W. Corder, Weston.

DODDRIDGE (1)—Delegate, A. Poole, West Union. Alternate, R. S. White, West Union.

EASTERN PANHANDLE (2)—Delegates, G. O. Martin and C. G. Power, Martinsburg. Alternates, E. Andrew Zepp, Martinsburg, and S. Elizabeth McFetridge, Shepherdstown.

FAYETTE (3)—Delegates, J. N. Jarrett, Oak Hill, W. P. Bittinger, Summerlee, and R. A. Updike, Montgomery. Alternates, J. B. Thompson, Oak Hill, T. K. Laird, Montgomery, and M. G. Hresan, Fayetteville.

GREENBRIER VALLEY (2)—Delegates, H. Charles Ballou, White Sulphur Springs, and D. G. Preston, Lewisburg. Alternates, W. E. Myles, White Sulphur Springs, and T. G. Matney, Peterstown.

HANCOCK (2)—Delegates, E. J. Weller, Weirton, and R. E. Flood, Cove Station, Weirton. Alternates, L. O. Schwartz, Weirton, and J. M. Brand, Chester.

HARRISON (4)—Delegates, L. D. Zinn, John F. McCuskey, C. O. Post, and S. S. Hall, Clarksburg. Alternates, James G. Ralston, D. H. Lough, H. V. Thomas, and W. H. Allman, Clarksburg.

KANAWHA (11)—Delegates, Robert C. Bock, A. B. C. Ellison, Charles E. Staats, William C. Stewart, V. L. Peterson, Richard N. O'Dell, H. M. Hills, Jr., R. R. Summers, Henry M. Escue, and C. B. Hall, Charleston, and O. M. Harper, Clendenin. Alternates, W. B. Rossman, Joel Allen, W. Paul Elkin, Duke A. Dent, John C. Condry, P. A. Tuckwiller, W. L. Cooke, John E. Lutz, and J. Paul Aliff, Charleston, H. H. Howell, Madison, and T. H. Blake, St. Albans.

LOGAN (3)—Delegates, A. M. French and E. H. Starcher, Logan, and E. R. Chillag, Holden. Alternates, J. L. Patterson, Logan, Harold Van Hoose, Man, and R. R. Vaughan, McConnell.

MARION (4)—Delegates, George T. Evans, S. W. Parks, H. S. Keister, and J. D. Romino, Fairmont. Alternates, Jorier Yost and J. P. Trach, Fairmont, and L. E. Baron, Mannington.

MARSHALL (2)—Delegates, David L. Ealy and Harold B. Ashworth, Moundsville. Alternates, William Paul Bradford and Don S. Benson, Moundsville.

MASON (1)—Delegate, C. Leonard Brown, Pt. Pleasant. Alternate, Dan Glassman, Pt. Pleasant.

McDOWELL (3)—Delegates, Ray E. Burger and A. J. Villani, Welch, and A. B. Carr, War. Alternates, R. O. Gale and R. H. Edwards, Welch, and Sam Milchin, Jenkinjones.

MERCER (4)—Delegates, R. S. Gatherum, E. L. Gage, and Upshur Higginbotham, Bluefield, and L. J. Pace, Princeton. Alternates, S. G. Davidson, Bluefield, and Daniel Hale and C. I. Butte, Princeton.

MINGO (2)—Delegates, E. T. Drake, Williamson, and R. C. Lawson, Red Jacket. Alternates, W. W. Scott, Williamson, and J. E. Johnson, Stone, Ky.

MONONGALIA (3)—Delegates, Maynard Pride, Eldon Tucker, and Carl Johnson, Morgantown. Alternates, W. E. King and Fred R. Whittlesey, Morgantown.

OHIO (5)—Delegates, J. M. Moore, M. B. Williams, A. J. Niehaus, R. D. Gill, and J. O. Rankin, Wheeling. Alternates, C. D. Hershey, William E. Ackerman, W. Carroll Boggs, R. Alan Fawcett, and D. E. Greeneltch, Wheeling.

PARKERSBURG ACADEMY (5)—Delegates, S. William Goff, Charles L. Goodhand, R. H. Boice, James L. Wade, and R. W. Corbitt, Parkersburg. Alternates, W. W. Davis, O. H. Brundage, Robert M. Biddle, F. L. Blair, and Paul L. McCuskey, Parkersburg.

POTOMAC VALLEY (2)—Delegates, G. E. Hartle, Moorefield, and V. L. Dyer, Petersburg. Alternates, J. H. Wolverton, Piedmont, and Robert Bess, Keyser.

PRESTON (2)—Delegates, H. C. Miller, Eglon, and T. S. McIntire, Kingwood. Alternates, B. B. Miller, Eglon, and W. P. Johnson, Jr., Arthurdale.

RALEIGH (4)—Delegates, Paul E. Vaughan, W. C. Covey, W. Fred Richmond, and Clark Kessel, Beckley. Alternates, Wade H. Rardin and Julian R. Lewin, Beckley, John W. Whitlock, Affinity, and Sam I. Sato, Slab Fork.

SUMMERS (1)—Delegate, Buford McNeer, Hinton. Alternate, J. T. Johnson, Hinton.

TAYLOR (1)—Delegate, Charles A. Haislip, Grafton. Alternate, Paul P. Warden, Grafton.

WETZEL (2)—Delegates, E. L. Coffield and T. B. Gordon, New Martinsville. Alternates, J. O. Theiss and Terrell Coffield, New Martinsville.

WYOMING (2)—Delegates, John H. Sproles, Itmann, and Florien Vaughn, Tralee. Alternates, B. W. Steele, Mullens, and E. W. Wilkinson, Pineville.

WOMAN'S AUXILIARY

to the

West Virginia State Medical Association

Official Program

27th Annual Meeting

The Greenbrier
White Sulphur Springs
July 19-21, 1951

THURSDAY AFTERNOON

July 19

12:00—Registration, Virginia Room.

4:00—Pre-convention meeting of the Executive Board, Virginia Room, Mrs. Ross P. Daniel, President, *presiding.*

THURSDAY EVENING

10:00—Bridge, dancing.

FRIDAY MORNING

July 20

8:00—Past President's Breakfast, private dining room, Mrs. Dana T. Moore, *presiding.*

9:30—Formal opening of the Convention, Virginia Room, Mrs. Ross P. Daniel, President, *presiding.*

Invocation.

Pledge of Loyalty.

Greetings—Dr. W. Thomas Hall, Staff Member, Greenbrier Clinic.

Response—Mrs. Charles L. Goodhand, Parkersburg.

Presentation of Convention Chairman—Mrs. Linville M. Halloran, Beckley.

Introductions—Mrs. Ross P. Daniel.

Presentation of President Elect, Mrs. John F. McCuskey.

Roll Call—Mrs. Seigle W. Parks, Fairmont.

Minutes of Pre-convention Board meeting—Mrs. Seigle W. Parks.

Convention Rules of Order—Mrs. U. G. McClure, Charleston.

Credentials and Registration—Mrs. W. Fred Richmond, Beckley.

Report of 1951 National Convention at Atlantic City—Mrs. John F. McCuskey.

Reports of Officers:

President—Mrs. Ross P. Daniel.

President Elect—Mrs. John F. McCuskey.

First Vice President—Mrs. Lynwood D. Zinn.

Second Vice President—Mrs. W. A. Thornhill, Jr.

Third Vice President—Mrs. Frank J. Holroyd.

Fourth Vice President—Mrs. Gates Wayburn.

Corresponding Secretary—Mrs. L. M. Halloran.

Recording-Secretary—Mrs. Seigle W. Parks.

Treasurer—Mrs. Charles L. Goodhand.

Reports of Standing Committees:

Archives—Mrs. Herbert Beddow.

Exhibits—Mrs. Dana T. Moore.

Finance—Mrs. H. E. Beard.

Historian—Mrs. Paul L. McCuskey.

Today's Health—Mrs. Paul P. Warden.

Legislation—Mrs. Francis J. Gaydosh.

Necrology—Mrs. F. Carl Chandler.

Organization—Mrs. John F. McCuskey.

Parliamentarian—Mrs. U. G. McClure.

Program—Mrs. J. F. Spargo, Jr.

Editor of News Bulletin—Mrs. D. C. Ashton.

Press and Publicity—Mrs. D. D. Daniel. Circulation Manager—Mrs. R. G. Broaddus.

Public Relations—Mrs. Ben W. Bird.

Revisions—Mrs. C. G. Power.

Reports of Special Committees:

Bulletin—Mrs. Henry C. Hayes.

Speaker's Bureau—Mrs. J. M. Coram.

Nurse Recruitment—Mrs. H. S. Keister.

Credits and Awards—Mrs. Newman Newhouse.

Southern Medical—Mrs. U. G. McClure.

Special Projects—Mrs. W. E. Hoffman.

Welcome and Presentation of Charters to the New Auxiliaries, Monongalia, Preston, and Greenbrier—Mrs. John F. McCuskey.

FRIDAY AFTERNOON

1:00—Luncheon in honor of Past Presidents of the Woman's Auxiliary to the West Virginia State Medical Association; Dr. John W. Cline, President of the American Medical Association; and presidents of the Ohio and Pennsylvania Auxiliaries, Mrs. C. A. Smith, *presiding.*

Guests:

Drs. Charles L. Goodhand, Robert J. Reed, Jr., William A. Thornhill, Jr., Ross P. Daniel, and Elizabeth McFetridge, members of the State Advisory Board; Dr. Frank J. Holroyd, President of the West Virginia State Medical Association; Mrs. Frank J. Holroyd; Mrs. L. S. Thompson, President of Woman's Auxiliary to the Southern Medical Association; and Mrs. V. E. Holcombe, President Elect of Southern Medical.

Call to Order—Mrs. Ross P. Daniel, President.

Invocation—Mrs. U. G. McClure.

Guest Speaker, Mrs. E. Wyatt Payne. Subject—"Socialized Prescriptions for Amercians."

3:00—Card games, golf, tennis, swimming, and horseback riding.

FRIDAY EVENING

10:00—Dancing, bridge, and Canasta.

SATURDAY MORNING

July 21

9:30—General Session, Virginia Room. Mrs. Ross P. Daniel, *presiding.*

Minutes—Mrs. Seigle W. Parks.

Announcements—Mrs. L. M. Halloran.

Credentials and Registration—Mrs. W. Fred Richmond.

In Memoriam—Mrs. F. Carl Chandler.

Resolutions—Mrs. Francis J. Gaydosh.

Reports of County Presidents:

Barbour-Randolph-Tucker — Mrs. Hu C. Myers.

Cabell—Mrs. Harlan A. Stiles.

Eastern Panhandle—Mrs. E. H. Bitner.

Fayette—Mrs. J. B. Thompson.

Greenbrier—Mrs. G. L. Lemon.

Harrison—Mrs. Richard E. Hanifan.

Kanawha—Mrs. Pat A. Tuckwiller.

Logan—Mrs. J. M. Straughan.

Marion—Mrs. George T. Evans.

McDowell—Mrs. M. J. Murphy.

Mercer—Mrs. Frank J. Holroyd.

Mingo—Mrs. John C. Lawson.

Monongalia—Mrs. Lucian M. Strawn.

Ohio—Mrs. Carroll Boggs.

Potomac Valley—Mrs. J. H. Wolverton, Jr.

Preston—Mrs. T. S. McIntire.

Raleigh—Mrs. R. G. Broaddus.

Taylor—Mrs. Paul P. Warden.

Wood—Mrs. William W. Davis.

Unfinished Business.

New Business.

Report of Nominating Committee—Mrs. George F. Evans.

Election of Officers.

Installation of Officers and Presentation of President's Pin—Mrs. Harold F. Wahlquist, President of the Woman's Auxiliary to the American Medical Association.

Inaugural Address—Mrs. John F. McCuskey, Clarksburg.

Courtesy Resolutions.

Adjournment.

SATURDAY AFTERNOON

1:00—Luncheon in honor of Mrs. Harold F. Wahlquist, Minneapolis, Minnesota, President of the Woman's Auxiliary to the American Medical Association, and Mrs. John F. McCuskey, president of the Woman's Auxiliary to the West Virginia State Medical Association.

Guests:

Presidents of the Ohio and Pennsylvania Auxiliaries; Mrs. L. S. Thompson, President of the Woman's Auxiliary to the Southern Medical Association; and Mrs. V. Eugene Holcombe, President Elect of the Southern Medical Association.

Call to Order—Mrs. Ross P. Daniel.

Invocation—Mrs. B. K. Peter.

Guest Speaker—Mrs. Harold F. Wahlquist.

3:00—Post Conention Board Meeting, Room 5222, Mrs. John F. McCuskey, *presiding.*

SATURDAY EVENING

7:00—Annual Banquet.

The

MYERS CLINIC HOSPITAL

PHILIPPI, WEST VIRGINIA

CLINIC STAFF

Radiology:
KARL J. MYERS, M. D.

Clinical Pathology:
E. E. MYERS, M. D.

Surgery:
HU C. MYERS, M. D.
A. KYLE BUSH, M. D.

Gynecology and Obstetrics:
EDNA MYERS JEFFREYS, M. D.

Anesthesiology:
C. W. SHAFER, M. D.

Internal Medicine:
JOHN E. LENOX, M. D.
J. L. RITTMEYER, M. D.

Pediatrics:
CORA C. LENOX, M. D.

Anatomic Pathology:
S. D. WU, M. D.

Resident Staff:
JOSEPH ALVAREZ, M. D., Surgery
HENRY G. STORRS, M. D., Surgery
MEREDITH J. EVANS, M. D., Surgery

☆ ☆ ☆

Pharmacist:
S. J. POLLARD, R. P.
(Military Leave)
G. W. DURLING, R. P.

Director School of Nursing:
CLIFFORD BURROUGHS, R. N., M. A.

Director of Nursing Service:
MARY R. CHAFFEY, R. N.

Chief Dietitian:
RUTH M. MITCHELL, B. S. (A. D. A.)

Assistant Director of Clinical Laboratories:
GORDEN S STARKEY, M. S., M. T. (ASCP)

Chief Laboratory Technician:
MALLADOR S. MYERS, B. S., M. T. (ASCP)

Clinical Photographer:
RICHARD CRAWFORD

Chief X-Ray Technician:
R. R. RATCLIFFE, R. T.

Business Manager:
E. R. DENISON

Administrator:
W. OBED POLING, M. A., M. H. A.

OBITUARIES

CALVIN FRANKLIN JACKSON, M. D.

Dr. Calvin Franklin Jackson, 52, of Bradshaw, died suddenly at his home in that city May 12, 1951. Death was attributed to coronary thrombosis.

Doctor Jackson was born in Fort Wayne, Indiana. He received his academic education at Toledo University, and his M. D. degree in 1927 from Ohio State University College of Medicine. He interned at Toledo Hospital in 1928 and located at Bradner, Ohio, where he continued in active practice until 1937. He then had postgraduate work in surgery in Austria, and in obstetrics and gynecology at the University of Pennsylvania, returning to West Virginia and practicing at War, in McDowell County. He moved to Portland, Maine, in 1946, but returned to West Virginia in 1951, locating at Bradshaw.

Doctor Jackson served in the Army Medical Corps during World War I.

He was a member of the Cumberland County (Maine) Medical Society and the Maine Medical Association. He was also a member of the McDowell County Medical Society, the West Virginia State Medical Association and the American Medical Association.

He is surived by his wife, Gertrude (Shannon) Jackson, and a son, John Edward, both of Portland, Maine.

* * * *

GEORGE WASHINGTON SIMMONS, M. D.

Dr. George Washington Simmons, 72, of Ripley, died June 11, 1951, at his home in that city following an illness of several years' duration.

Doctor Simmons received his M. D. degree in 1903 from Maryland Medical College, Baltimore. He was licensed to practice in West Virginia that same year and located at Ripley, where he continued in practice continuously until a few months preceding his death.

Doctor Simmons was a widely known stockman and had been director of the bank of Ripley for the past 25 years.

Besides his widow, he is survived by two daughters, Mrs. Mildred Reynolds and Mrs. Lenore Jackson, of Ripley; and four sisters, Mrs. Emma Green, of Fairplain, Mrs. Ella Green, of Ripley, Mrs. Canna Lee, of Dunbar, and Mrs. Millie Kiser, of Kenna.

* * * *

JOHN A. DAVIS, M. D.

Dr. John A. Davis, 84, formerly of Cedar Grove, West Virginia, died June 19, 1951, at his home in Roanoke, Virginia. He had lived and practiced in Roanoke continuously since moving there from Cedar Grove several years ago. He is survived by a daughter, Mrs. W. W. Petty, of Roanoke.

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Vol. XLVII AUGUST, 1951 No. 8

THE PROPHYLAXIS OF EWINGISM*

By FRANK J. HOLROYD, M. D.
Princeton, W. Va.

Until the year 1948, the West Virginia State Medical Association had no organized public relations program. In fact, the Association was almost exclusively scientific and social. We met once a year, had a good scientific program, had lots of fun, went home and more or less forgot about public relations until time for the next annual meeting. Our environment has forced a change in that beautiful way of life.

Those who differ from us, in order to further their own political aims, have fostered a campaign against the American system of medical care and we have been forced to fight back from every quarter. Our relations with the public became violently ill, convulsions occurred, and death seemed imminent. This paper is a case history of the treatment of the case, with recommendations for future care.

SECOND FROM THE TOP

The acute phase is over. Convulsions have stopped. The temperature is almost normal. The case is progressing satisfactorily but the patient is far from recovered. In the acute stage, the West Virginia State Medical Association, with the able assistance of the Auxiliary, was second among the 48 states in the effectiveness of work as measured by resolutions obtained from local and state organizations opposing compulsory health insurance.

Over 1000 groups in West Virginia have voiced their opposition to socialized medicine by sending resolutions to their lawmakers condemning it. We must cement our relations with these groups. They believe in the American way of life and must be kept informed of what we are trying to do. There are other groups, some labor unions for example, which have not taken a definite stand against government medicine. We must convince these groups that our present system of medicine is the best. Continued alertness and necessary activity on the specific issue of socialized medicine and the broad issue of state socialism is necessary.

COMPULSORY INSURANCE STILL A THREAT

Any person who thinks the patient is well should read Oscar Ewing's Federal Security Agency's annual report in which he says in part: "The Federal Security Administrator repeatedly reexamined this issue (Health Insurance) in the light of fact and opinions. The conviction stands that national health insurance is the best way yet devised to prepay the cost of medical care and make adequate medical services widely available. The conviction stands, too, that health insurance would surmount the financial barrier to medical care without jeopardizing the traditional responsibilities of anyone—the doctors, the people or their government officials."

For the next two years and possibly longer (?), we will have on our hands Oscar Ewing and President Truman who will undoubtedly leave no stone unturned to force upon the country a federal system of compulsory health insurance. It makes no difference to them if they get in through the front door, the back door, the side door, or the basement. With the present Con-

* Annual Address of the President, West Virginia State Medical Association, 84th Annual Meeting, The Greenbrier, White Sulphur Springs, July 19, 1951.

gress on our side, we will have two golden years in which to get our public service program so firmly entrenched that no sensible person or organization will ever dare attack us in public. The National Education Campaign of the American Medical Profession has successfully kept socialized medicine from being enacted into a federal law.

PUBLIC RELATIONS THE ANSWER

An important function of the State Medical Association is to stimulate and encourage the component medical societies to develop strong public relations programs and to join with their state organization in achieving statewide medical public relations goals.

The purpose of a positive, constructive medical public relations program is to remove the need or the clamor for any other type of medical care system. Doctors, above all persons, because of the nature of their work, know the difference between symptoms and causes. We must apply this knowledge to the curing of diseased public relations. Our proposed public service program recognizes this. When the causes are removed, the symptoms showing up in the political pus of socialized medicine will disappear.

Dr. Elmer L. Henderson, immediate past president of the AMA, has said: "We must push the extension and full development of state and local programs for providing 24-hour emergency medical service, settling complaints of patients, eliminating excessive fees, placing doctors in communities that need them, bettering press and radio relations and improving medical public relations in every way possible. We must do all of these things—faster and better than ever—if we are to make the most of our two-year grace period, and bring about the final death sentence for Ewingism."

President John W. Cline and the members of the AMA board of trustees feel that the strengthening of the county societies' public relations program is the most important task facing the medical profession in 1951. Dr. Cline has said: "The education of the public must take place at the County Society level."

In order to further medical public relations, we must serve the people by searching out the underlying causes of dissatisfaction with the medical profession and make an honest effort to correct them. Whether or not the causes of the dissatisfaction are real or imaginary makes little difference. If they are real, our job is to correct them. If imaginary, it is our job to clarify the issues involved. Good medical public relations is like making love: we have to be willing to participate or we won't get much satisfaction out of it.

WISE PUBLICITY NOT ADVERTISING

Since the beginning of medical history the followers of Aesculapius have shunned publicity. In so doing, we have allowed the public to receive its medical information from persons with selfish interests, quacks, and members of off brands of cults who advertise freely. We have failed to realize that the public, being vitally interested in medical matters, has the right to be properly informed. And who is better qualified, by reason of training and experience, to give this information than men and women who are devoting their lives to rendering medical service? We can't escape the fact that it is our duty and responsibility to supply this information.

The State Medical Association, the AMA, and component societies use the newspapers, radio, motion pictures, exhibits, posters, pamphlets and magazines to tell about the advances in medicine. In addition, more and more doctors are accepting speaking engagements before local professional and lay groups. There is no group in existence with as great a potential for excellent public relations as the local group in our profession. Patients, friends, and acquaintances all look to their doctor not only for health care but also for family guidance. They call on him not only to set a broken arm but also to sympathize with a broken heart. Because of his or her high standing, an individual doctor can unwittingly harm the entire medical profession by some example of poor public relations.

OFFICE PERSONNEL

There is one serious mistake we frequently make. We are inclined to pay little attention to our office personnel, forgetting that our office assistants can be ambassadors of good will in their contacts with the laity. We must educate them in the problems of our profession, instructing them particularly in the human interest involved. Every doctor should teach his receptionist to be courteous and efficient, to think quickly, and to demonstrate a personal interest in every patient, even on the telephone. It is highly important that we choose the members of our office staff with extreme care, always keeping the public relations aspect in mind.

PARTICIPATION IN CAMPAIGNS

During the past year, our members have more actively participated in public affairs than ever

before. They have been better citizens. In the last election physicians, as individuals, took an active interest in the men who sought to represent us in our government. The AMA and state and county medical societies cannot legally contribute to or expend funds in support of, or in opposition to, candidates for federal office, or use medical society letterheads or facilities to advance work in behalf of a candidate. Individuals forming political committees may not make use of any official position or office which they may hold or occupy in any medical organization. The most effective method of political action is the formation of an independent committee as was so well demonstrated in Florida during the last campaign. We hope such a committee will soon function in West Virginia.

SUPPORT FOR AMA

The AMA is the only organization which can properly present the opinions and protect the interests of the physicians of America. Few will contest the propriety of the objectives of the AMA and the similarity in interest of the physicians and the people of America. In any vigorous growth rooted in democracy, all functions and decisions will not satisfy all constituents. Policies of the parent organizations will often be at variance with viewpoints of certain state organizations, and even more with viewpoints of individuals.

The decision to withhold or withdraw support or to resign membership in the AMA should be carefully considered. American medicine is passing through a most critical period. The active participation of every physician in this country is needed to guide the policies of the changing order in the direction suited to the best interests of the public and of the medical profession.

I am very happy to report that 92.3 per cent of our dues-paying members have also paid AMA dues for 1951.

NATIONAL FUND FOR MEDICAL EDUCATION

The National Fund for Medical Education has been held as one of the most vital projects ever undertaken by the AMA in which the physicians may take part. Contributions, however, will come from individual physicians in proportion to the educational and promotional effort directed to them by their societies.

It should be remembered that one of the basic reasons for the high regard in which the American doctor is held is the training program which has been established during the past fifty years. Much can be attributed to the high standards of medical education which have been maintained during that time. The need for voluntary funds to hold and improve these high standards cannot be stressed too strongly since the public ultimately benefits from all advances in medical knowledge. Medical societies more than any other group should make the effort to improve medical education in the self sufficient American way.

AUXILIARY ONE OF COUNTRY'S BEST

The West Virginia State Medical Association has the most active women's auxiliary in the United States. Since one or two other states may want to argue about this, we will take a look at the record.

The members of our Auxiliary were responsible for the adoption in this state of most of the one thousand resolutions against socialized medicine during the big drive. This included many firsts and many exclusives. They delivered the final punch to get the medical-dental-nursing school by showering the lawmakers with hundreds of petitions, and they are now and always have been active in all community affairs and women's organizations.

As far as Public Relations is concerned, our Association should be called the Men's Auxiliary to the Woman's Auxiliary to the West Virginia State Medical Association.

COOPERATION WITH PRESS AND RADIO

The public is vitally interested in medical news. A continuing program of public health education, utilizing all possible media, is needed to keep the people informed of the latest advances in the prevention and control of disease. It is also important that we have a well rounded news and informational service to inform the public on all aspects of the state program, what has been done, what is being done, and what is planned for the future. Our relations with the press and radio groups have improved remarkably in the past two years. We have had two well attended conferences with them and there have been open and free discussions of our various mutual problems. From these conferences has come our Doctor-Press-Radio Code of Ethics, which we believe will be beneficial to all groups concerned.

VOLUNTARY HEALTH INSURANCE PLANS

The positive part of the National Education Campaign was the promotion of voluntary health insurance plans. We must make the maximum effort to promote the full growth and development of all sound plans with the ultimate object

of making low-cost, comprehensive protection available to everyone in the state. Voluntary health insurance plans are growing rapidly, with new and improved types of coverage, based on sound acturial standards.

In West Virginia, as of April 1, 1951, 269,240 persons were enrolled in Blue Cross, and as of January 1, 1951, 193,485 in Blue Shield. In addition, it is estimated that, as of April 1, 1950, 1,000,000 persons in the state were enrolled in commercial insurance plans. Complete commercial insurance company figures for the year ending April 1, 1951, are not yet available.

The remarkable growth and development of voluntary health insurance, which has taken place mainly in the past ten years, and which is still gaining momentum, is proving that voluntary methods can take the economic shock out of illness, and that dangerous government intrusion in the field of medical care is completely unnecessary.

Because of the tremendous interest of the public in health insurance, a fertile field is being provided for unscrupulous insurance companies to sell policies with very little coverage at a very low premium rate. Physicians should be very careful about endorsing any such plan until they are sure what they provide, otherwise patients may lose confidence in all plans.

GRIEVANCE COMMITTEES

The establishment of a "Grievance Committee" to settle the complaints of patients has resulted in better relations between the physician and the public. In West Virginia, grievance committees have been set up in all component societies, with the council as the appeal board. Their success has been remarkable. The fact that such a committee is available stops most complaints and the rest are usually misunderstandings and not real complaints. It has not yet been necessary for our state grievance committee to act in any case. All complaints have been handled either at the local level, or by the council.

Some type of adequate program for society members should be established. This might be divided into two parts, (a) discussions of the proper way to itemize bills, proper relationship in professional calls, the need for discussing payment of a bill, and a method to provide "down-payments"; and, (b) the need, if necessary, to adopt a "get tough" policy with members who continue to overcharge and otherwise bring discredit to the profession.

We have a carefully planned scientific and professional program designed to keep the doctors abreast of the latest medical advances, to foster the highest standards of ethical practice, to promote amiable relations with hospitals and other agencies in the health field, and to sell the doctors themselves on the purpose and methods of our own public relations programs.

Every physician should read Chapter 3, Article 3 of the Principles of the Medical Ethics of the AMA which says: "The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Whoever chooses this profession assumes the obligation to conduct himself in accord with its ideals. These principles of medical ethics have been and are set down principally for the good of the patient and should be observed in such a manner as to merit and receive the endorsement of the community. The life of the physician should be capable, honest, decent, courteous, vigilant, and a follower of the golden rule will be in itself the best exemplification of ethical principles."

We must never forget that medicine must be practiced with a heart as well as a head.

RURAL HEALTH

Our relations with the farm groups have improved during the past two years. We have had two big meetings at Jackson's Mill at which the problems of both groups have been discussed. Each group now better appreciates the problems of the other. The basic problem is the acute shortage of physicians in the state.

For thirty years, the members of the State Medical Association, with our friendly supporters, have waged a strong campaign to establish a complete medical-dental-nursing school in West Virginia. Our efforts were successful in the last legislature. With the establishment of the school, we expect a solution in part to the problem of the shortage of physicians, dentists, and nurses.

The Medical Examining Board has lowered certain standards for medical license in the state in an effort to help relieve the present acute shortage of doctors. As soon as we begin to graduate physicians from our school, we hope to establish an active program, similar to the Kansas Plan, designed to aid local communities which need doctors and modern medical facilities. We are cooperating in every way possible with farmers, farm organizations and other groups interested in the development of rural health programs.

NIGHT CALLS

Night and emergency service is primarily a problem of large metropolitan areas. In West Vir-

ginia, Charleston has an excellent system. All cities in the state should have a similar service.

This is one of the grave problems confronting American medicine today. It is not so much that these calls are actual emergencies, but it is the fact that the patient is unable to find a doctor. The whole story never leaks out; it is only the squawk that gets the headlines. The biggest reason for the refusal of doctors to make night and emergency calls is that many of these calls are for no reason except to satisfy a sudden desire on the part of the patient or family for a doctor to see a patient who has been sick for days.

Another frequent complaint is the failure of doctors to make home calls. A patient wouldn't expect to get his car fixed in his own garage but he expects a doctor to function as well in a home as in his office or a hospital. We will meet the patient far more than half way, but let's always keep in mind that there are two sides to the problem. Cooperation is an excellent word but it takes two or more people to make it mean anything. One of the most common complaints in the smaller cities is that all the doctors are taking the same afternoons off. This may easily be corrected by doctors rotating afternoons off.

HEALTH COUNCILS

Physicians should assume active leadership in the establishment and operation of community health councils and other health agencies. This is urged and recommended in an effort, not to obtain physician domination of these activities, but to make the extensive knowledge and experience of a trained physician available to his home community.

COOPERATION WITH LABOR AND MANAGEMENT

West Virginia is primarily an industrial state, so cooperation with labor, management and all other parties interested in the development of effective industrial health plans is an important part of our local and state programs. An immense amount of work is being done in an effort to work out a program with the United Mine Workers Welfare Fund which will be satisfactory to both groups.

CIVIL DEFENSE

We have assumed leadership and cooperation in the state program for civil defense. We will provide an adequate supply and distribution of medical personnel to meet both civilian and military needs of national defense. Our record during World War II was good. It will be equally as good in the present emergency.

PUBLIC SERVICE

The medical profession does not feel that its public relations program is perfect or that everything is as it should be, but we emphatically believe that there is no other group in this country today which meets, and has met, the needs and demands of the people to any greater extent than we have under our present system of medical practice. We, therefore, bow our heads to none in the matter of public service. We realize that there are deficiencies in our present system but we are correcting them by group and individual action.

During the acute stage of our patient's illness, we were careful not to say anything to upset him, but now we believe he is sufficiently recovered to discuss the other side of the picture. All that has been said and written has been about what the doctor should do, but the patient has certain responsibilities too. Unless we explain this to him, we'll have a chronic invalid on our hands who will never get well. Like the doctors, a very small percentage is at fault, but like the doctors, this can be very important.

TUBERCULOSIS AMONG CHILDREN

In 1950, 29 children under 15 years of age died from tuberculosis in the District of Columbia. This is in contrast to 10 deaths in this age group the year before. Similarly, there has been an increase in the new cases of tuberculosis reported among this age group. In 1949 there were 53 new cases reported, in 1950, 75, an increase of 41 per cent.

What are the factors which may have contributed to this? We know that a person contracts tuberculosis only when he is in contact with an active case of the disease. Since a child's contacts are largely limited to members of the family or the household, we may presume that he receives his tuberculous infection from this source.

According to reports of the District of Columbia Health Department, there are over 1,000 active cases of tuberculosis in our community which are not hospitalized. Are these people spreading their disease in the community?

The Washington Chest X-ray Survey of 1948 showed us that the prevalence of tuberculosis among older adults was considerably higher than among younger. We also know that grandmother is less likely to have a chest X-ray examination than the younger adult member of the family.

Even though the extent of the problem of tuberculosis among children is not yet known, we do have these facts: 3 times as many children died from tuberculosis in 1950 as in 1949; over one third more cases were reported among the same group during the same period. Pediatricians particularly as well as the general practitioners have a right to know these facts so that they can be even more vigilant in their case-finding activities.—Edward K. Funkhouser in Medical Annals, District of Columbia.

POLIOMYELITIS IN WEST VIRGINIA IN 1950

By H. C. HUNTLEY, M. D., M. P. H.,
Director of Disease Control,
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The incidence of poliomyelitis in West Virginia in 1950 was the second highest in the annals of the State Department of Health. The final case load was 377. The highest year recorded was in 1940 when a total of 662 cases was reported.

Of the cases investigated by the County Health Departments and reported to the State Department of Health this year, there were 159 females and 193 males. This somewhat higher incidence of the disease in the male sex is the usual finding over the nation as a whole for most years.

The distribution according to geographical areas was somewhat higher in the southern and western counties of the state with 233, or 62 per cent, of the 377 cases occurring in the counties lying in or southwest of the Kanawha-New River Valleys. This area contains approximately 50 per cent of the population of the state.

Apparently the extremely concentrated and severe epidemic in western Virginia had no effect this year on the incidence of poliomyelitis in West Virginia. In the counties of Mercer and McDowell, which were the nearest to the affected areas of Virginia, the incidence rate was 20/100,000 as compared with 31/100,000 in the next row of counties consisting of Raleigh, Summers, Monroe and Wyoming.

Of the total of 377 cases, investigation cards were returned on 352 by December 25, a tribute to the diligence and perseverance of the workers in local health departments.

The accompanying graph shows the incidence of poliomyelitis, by months, for West Virginia in 1950 as compared with the two previous high years of 1949 and 1940.

POLIOMYELITIS IN WEST VIRGINIA 1940, 1949 and 1950

As may be seen from the accompanying graph, the peak did not go as high in 1950 as in 1940 or 1949 while, at the same time, the plateau was maintained longer with the case load continuing at a relatively high level throughout October. This same phenomenon has been observed over the United States in 1950 and whereas from previous experience we had expected approximately 250 cases for the year, it soon became apparent that the anticipated had been underestimated.

From the 352 case histories received, the following information has been abstracted. It will be noted that many of the histories were necessarily incomplete in one or more respects.

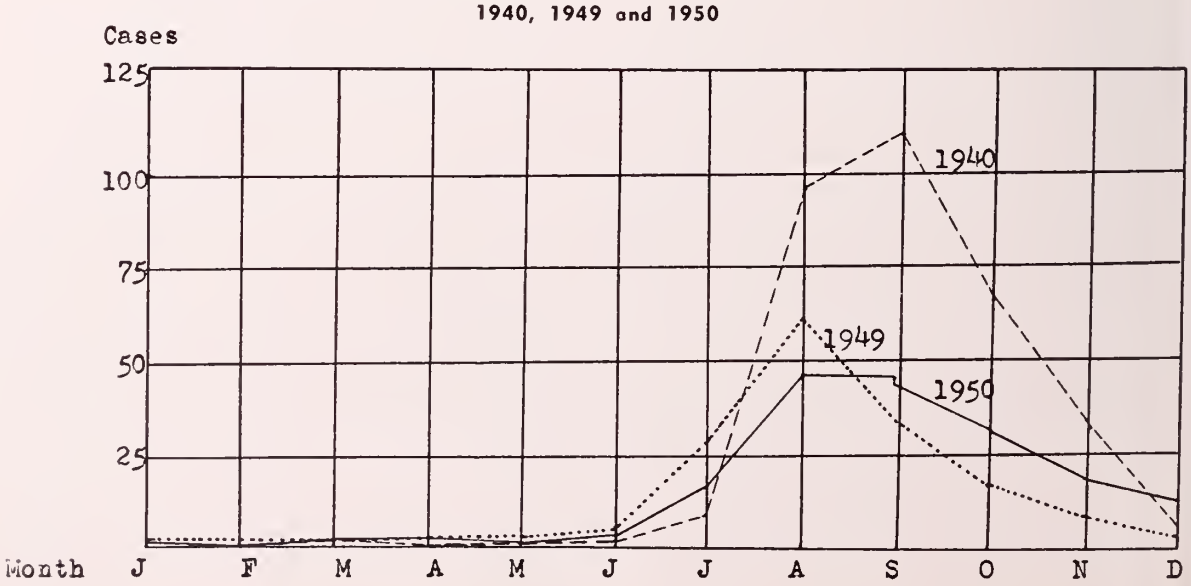
Evidence of muscular or bulbar paralysis:

Yes—200 cases
No—121 cases

This is a somewhat higher rate of paralysis than is the general experience and suggests two possibilities. Either there were a number of undiagnosed mild cases or we experienced a somewhat more virulent strain of virus than usual.

If we arbitrarily divide these case histories by selecting the first 100 in which paralysis occurred we find that on the date which these first 100

POLIOMYELITIS IN WEST VIRGINIA
1940, 1949 and 1950



paralytic cases were reported there were only 48 nonparalytic cases, whereas for the last 100 cases in which paralysis was reported there were 73 nonparalytic cases. Here, also, there were two possibilities: either a decreasing severity as the disease progressed or, more probably, an increasing awareness on the part of the family physician.

According to age groups the reported cases were divided as follows:

Years:	0-4	5-9	10-14	15-plus
Cases:	138	89	70	56

From this it can be seen that, even taking into consideration the varying numbers of persons in the different age groups, there was shown a definite predilection to the younger ages. This also is the usual experience in other locales.

Although there was no statistically significant difference, it is noteworthy that during the early part of the epidemic there was a considerably higher percentage of cases in the early age groups as compared with the latter part of the season.

Of the 332 cases, where the number of children under the age of 16 were reported, it was found that there was an average of 2.5 children in each home where a case was reported. This compares with an average for the state of 1.4 children under the age of 16 per family. This means only that the more children in a home, the more likely there is to be any contagious disease of childhood.

As was to be expected in the first group of cases reported, there was no particular evidence of any unusual concentration of cases around those previously reported. In the last 150 cases reported, however, 53 of the 150 occurred within a 2 mile radius of a previously known 1950 case. This is 13 times the expected incidence within this area if we are to assume an evenly distributed population; even without this assumption, it is still a very significant figure which indicates spread from the original focus.

The question of sanitation was rather indefinite as it must, in any case, depend upon the varying judgments of different persons, and opinions vary from person to person. The surroundings were classified as "good," "average" and "poor," depending upon such items as the water supply, method of sewage disposal and the general surroundings. The actual results obtained were as follows:

Good — 112
Average — 105
Poor — 104

The final question concerned the problem of surgery and immunizations during an epidemic. This was placed in the questionnaire late in the season and comparatively few replies were obtained. The question itself was improperly worded as to the previous date of either surgery or immunizations and the interpretation probably varied as to the meaning. For these reasons it is felt that the results obtained up to the present time are inconclusive.

CONCLUSIONS

1. The incidence of poliomyelitis in West Virginia in 1950 was not affected by the extremely severe localized epidemic occurring in southwestern Virginia.

2. The reported cases of poliomyelitis remained at a high level much later in the season of 1950 than had been the experience in past years.

3. There was a predilection for the younger age groups in 1950 as has been the customary experience in previous epidemics of poliomyelitis in other states.

4. There was evidence of concentration of cases during the latter part of the season around those areas where cases were reported during the beginning of the epidemic.

EDUCATION FOR HEALTH

Physicians experienced in the field of preventive medicine feel that the periodic supervision of the aging process with accompanying early detection and treatment of any disease process would obviate a substantial proportion of hospital admissions both medical and surgical. Also a program of voluntary periodic health examinations advocated on a national scale by the entire profession would (1) effect substantial savings in the amount spent for medical care, (2) materially reduce hospital admission, (3) eliminate the need for expansion of hospital facilities beyond that required by the increase in population, and (4) immeasurably improve the health of the entire nation through the physiologic, psychologic, and factual well being that the assurance of periodic health care would give to the individual.

To make each doctor's office an individual unit in the fight for better public health, a medical maturity regarding preventive medicine is needed by both laity and medical profession. The answer lies in education, not socialization. Many will question both the fundamental soundness and practicality of the idea of widespread periodic health examinations of well persons, but a dedication of even a small part of the effort and time of physicians to the advocacy of such a program and to the administration of true and adequate preventive medicine would demonstrate the soundness of this concept.—Robt. B. Marin, M. D., in J. Med. Soc. New Jersey.

ARTERIAL HYPERTENSION*

By IRVINE H. PAGE, M. D.,†
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Treatment of patients with hypertensive vascular disease is based on definitive diagnosis and classification of the kind of malady from which the patient suffers. Arterial hypertension, like fever or leukocytosis, is of multiple origin. No discussion of its treatment is possible which does not presuppose an estimate of the nature, extent and rate of progress of the disease.

The term "hypertensive vascular disease" has value because it is broad and inclusive. It means a state in which arterial tension is increased over long periods of time and one which is usually associated with premature damage to blood vessels and to the tissues and organs they supply. It has no etiologic and often little physiologic connotation. It includes a most common lethal disease of adult life, namely, essential hypertension, the cause of which is unknown. The term also includes a variety of secondary, sometimes transitory, hypertensive states, the origin and nature of which are either known or suspected on adequate clinical and functional grounds. While this review of treatment is concerned more particularly with "essential hypertension," it is also concerned with some of the other types of hypertensive disease which simulate essential hypertension.

Essential hypertension is characterized by persistent elevation of systolic and diastolic arterial pressures. In its early stages, which begin probably in the 20's and 30's, or in adolescence, the elevations of arterial pressure are transitory, and subside promptly on rest and minor reorientation of habit and attitude. In its later stages, the elevations of arterial pressure are more severe, more lasting, more resistant to minor modes of treatment. Finally, the levels of pressure, even at bed rest and under sedation, tend to stabilize at high levels. At any stage in the disease but, as might be expected, more commonly during the phases of persistent and severe elevation of pressure, there appear evidences of advancing arteriolar sclerosis which are reflected in damage to the brain and, in lesser degree, to the retina, kidney and other vascular beds. With these go signs of damage to the function of the myocardium. In a small percentage of patients essential hypertension is manifest as the "syndrome of malignant hypertension" in which the progress of vascular damage is catastrophically accelerated with predominance of damage in the renal vascular bed. The same syndrome of accelerated arteriolar damage may be precipitated by other hypertensive disease states.

The so-called "secondary" hypertensions, i. e., the hypertensive states of known or suspected origin, can be classified according to their causes as: (1) neurogenic, (2) endocrine, (3) vascular and (4) renal. As examples we note the hypertension in chronic porphyria as of presumptive neurogenic origin, the hypertension and nephrosclerosis of Cushing's syndrome, adrenal cortical tumor and of adrenal medullary pheochromocytoma as of endocrine origin, the hypertension of coarctation of the aorta as a type of cardiovascular hypertension and that of chronic renal disease (glomerulonephritis, pyelonephritis) as of renal origin. The therapeutic importance of such a classification and diagnosis lies in the fact that, for example, cases of pheochromocytoma and some with unilateral renal disease can be cured by surgical removal of the offending organ.

The hypertension of aortic arteriosclerosis is of particular significance in considering the treatment in hypertensive vascular disease. The increase in arterial pressure is largely, if not entirely, systolic. It is due to a failure of the aorta, which has become inelastic, to expand and adapt its capacity to the blood ejected from the heart during each beat. Consequently, there is an abrupt rise in systolic tension in the large arteries as blood is forced into them on its way to the arterioles. The extent to which systolic pressure rises depends on cardiac rate and cardiac output and, in the last analysis, most of all on stroke volume. Consequently, anything which tends to change stroke volume or cardiac output tends to have a parallel effect on systolic tension. Thus, it is not paradoxical but entirely logical that this form of hypertension in which the large arteries are least elastic is also the form in which the levels of systolic tension fluctuate most widely. Cardiac output in intact human beings is predominantly under nervous control but varies also with metabolic rate, tissue demands and other factors. Therefore, it is a common experience that mild measures such as rest, reassurance and sedation and control of obesity, which tend to decrease cardiac output, often have dramatic results in decreasing arterial tension in elderly people. It is this responsiveness of pressure levels in arteriosclerotic hypertension which has lead so many unwary clinicians into unwarranted therapeutic claims. Similarly, the confusion of arteriosclerotic hypertension with essential hyper-

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tension (diastolic hypertension) has lead many older patients into disproportionate anxiety and concern.

Arteriosclerotic hypertension in contrast to essential hypertension is a disease which begins in middle and old age. Usually in the 50's transient increases of systolic tension occur which, as time goes on, becomes persistent, at least during casual measurements. The diastolic pressure is little if at all increased. The underlying disease is a generalized arteriosclerosis. There are therefore to be found evidences of arteriosclerosis in the heart, brain and kidneys in most of these people. But this disease has a very slow rate of progress. Although vascular accidents can occur without warning, most of these people live to very nearly a normal expectancy of life.

The treatment of this condition is basically the treatment of old age and of vascular complications as they appear. Many of the general and some of the more specific measures which apply in essential hypertension apply here also.

For many years we have stressed that the type of treatment to be used in essential or malignant hypertension depends on an evaluation of how rapidly vascular disease is progressing. Usually this cannot be estimated at one examination of the patient. Unless the disease is advancing very rapidly, it is better to wait several months or more and again determine the change, if any, from the last examination.

Common experience and a little thoughtfulness have shown that the blood pressure measurement alone is an insufficient datum on which to base prognosis. This fact has been pointed out many times but still, unfortunately, can bear reiteration. Combined with examinations of a variety of representative vascular areas such as the kidneys, heart and brain, blood pressure figures are of great value. The emphasis should be on the way the blood vessels and heart are withstanding the elevated pressure, not on the pressure itself. During the first examination the physician acquaints himself with the degree of vascular damage already present but does not determine upon the prognosis until further examinations have disclosed the all important problem of the rate of advance of the vascular disease. This is not the place for a detailed analysis of this or the problem of treatment. Rather I have contented myself with a more schematic presentation since the more complete one has recently been published.

*(Page, I. H., and Corcoran, A. C.—"Arterial Hypertension: It's Diagnosis and Treatment," Yearbook Publishers, Chicago, Illinois.)

TREATMENT

1. *General Measures.*—In a short space, it is not possible to describe in detail the general measures so important in the treatment of hypertensive patients. This has already been done in a recent manual for the patients themselves.

Perhaps the principles of these general measures can be summed up as follows: (1) cultivating serenity; (2) coming to terms with the inevitable; (3) living a life of moderation; (4) participating only in those affairs which one can influence; (5) avoiding fatigue; (6) having more frequent periods of rest; (7) avoiding obesity; (8) avoiding food fads and eating a well balanced diet in small repasts; (9) selecting a physician in whom the patient can place full responsibility for wise counsel. Each of these measures requires much thought and planning, and when carried out thoroughly and systematically will add much to the comfort of life and probably conserve life itself. Administered in a cursory fashion, both physician and patient lose invaluable aids.

Excessive nervousness contributes greatly towards keeping the blood pressure elevated. Its control often is a complex problem. If, as often happens, it is associated with the female menopause, administration of stilbestrol (0.1 to 0.5 mg.) daily with meals may do much to relieve it. Occasionally it is due to marked hyperthyroidism when it should be treated as any other case of this disease. Penobarbital (30 mg. t.i.d.) is a generally useful sedative and may be continued for a long time if necessary. The barbiturates are very satisfactory when used under the physician's guidance for insuring adequate sleep. Other more elaborate physical methods such as Jacobson's "progressive relaxation" will not be discussed in this short review. Psychonalysis or psychiatric guidance has its place in the treatment of a few patients.

If hypertension occurs in association with one of those rare diseases such as tumor of the adrenal gland, clearly the treatment consists in removing the exciting cause. Less than three per cent of all patients will come under this category.

2. *Nephrectomy.*—If it is demonstrated that disease is limited to only one kidney, removal of the kidney has been observed in a few cases to be followed by return of the blood pressure to near normal levels. The indications for nephrectomy are unfortunately not so simple. There is no known method which demonstrates that one

(*Page, I. H.: "Hypertension, A Manual for Patients"; C. C. Thomas, Publisher, Springfield, Illinois.)

kidney is entirely normal and the other diseased. The impression is all too common that reduced excretory function in one kidney and normal renal excretory function in its partner constitute convincing evidence. Actually, there is no direct relationship between excretory efficiency and height of the blood pressure. Nor does there appear to be any clearly defined relation between hypertension and the appearance of the kidney as demonstrated by the pyelogram. Secondly, the conclusion has been drawn from very brief experiments in rats that the removal of the kidney causing hypertension usually is followed by a return of blood pressure to normal. When the latter has been elevated for months or years, removal of the offending kidney ordinarily is not followed by a return to normal. Much the same seems true in human beings. So there has been in the past years a false optimism that nephrectomy would be a very important tool in the treatment of hypertensives. Perhaps this optimism is now giving way to a wave of too great pessimism.

Thus, if it is shown by x-ray examination or by kidney function tests that one kidney obviously is infected and that hypertension has developed in the past two or three years and that the other kidney seems normal, it probably is desirable to remove the offending kidney. Here, as in most situations, the indication is urologic rather than medical. But if the hypertension has persisted for five years or more, if there are evidences of arteriolar sclerosis, or if the evidence of unilaterial disease is unconvincing, it would appear better to avoid the operation. In doubtful cases a clearly positive family history of hypertension may be a contraindication, since familial hypertension more often is "essential" than renal.

As an example of the remarkable effects nephrectomy sometimes produces in early cases of hypertension, that of MacKay, Proctor and Roome may be given. This patient underwent pelviolithotomy and while still in the hospital the arterial blood pressure began to rise. This was followed shortly by the signs of severe malignant hypertension. Because of the alarming course of the disease nephrectomy was decided upon. At operation it was found that a thick hull enveloped the parenchyma, from which the kidney could be shelled out. Shortly after nephrectomy the blood pressure returned to normal and all of the signs disappeared.

In general it is wise to view nephrectomy as a procedure which should be done when removal of the kidney would be desirable on urologic grounds. Only occasionally is a patient seen in whom abolition of the hypertension is the prime object of the operation.

3. *Potassium Thiocyanate.*—This salt has had a checkered career in the treatment of hypertension. It was introduced many years ago but fell into disrepute because of toxic manifestations occasionally observed. When Barker published a method for controlling the dosage by its level in the blood, a new wave of interest occurred. Since that time the drug has been extensively studied. Despite this, there are two schools of thought about its value.

Many are convinced that it has a real place in the treatment of hypertensives. It lowers arterial blood pressure moderately in roughly 40 per cent of the patients and has a mild sedative effect if optimal levels of thiocyanate are reached in the blood stream. It often is a most valuable remedy for intractable headaches that afflict hypertensives. These appear to be its especial virtues.

Its drawbacks consist chifly in the fact that it often causes a feeling of intense lassitude, of heaviness of limb. Eruptions on the skin, and more especially the mucous membranes, may occur. In older patients mental disturbances occasionally have been encountered. Death from thiocyanate has even been recorded in the literature but analysis of such records seems to indicate unwise judgment in the use of the drug in most of these cases. It is fair to say that death has occurred at some time from almost every drug in common use.

Our own experience with some 500 patients treated with the drug is that it is useful. We have seen only occasional patients who showed signs of its toxic action, none of which has been serious. No deaths have occurred. It has been not uncommon to see patients who were said to respond unfavorably to thiocyanate but who, when carefully controlled, showed no toxic signs and even a favorable response.

Sympathectomy.—Dorsolumbar and splanchnic nerve resection as methods of treating patients with hypertension, just as in thiocyanate, have been greeted with cheers or jeers. It probably is true that reasons initially offered for the performance of these operations were incorrect and, as a result, a flood of criticism greeted the work. Time has shown much of this to be unjustified. The field was further confused by those who attempted to transfer results obtained on animals with experimental hypertension to human beings, concluding that since in dogs these operations produced little or no reduction in arterial pressure, the same was true in man.

Probably, fortunately, sympathectomy for the treatment of hypertension developed empirically and before hypotheses were advanced to explain it. In fact, if it had depended on some of them it might never have been practiced. Thus, it has been suggested that the effect of the operation does not depend on denervation of the vasomotor apparatus of the abdomen other than the kidneys but rather on the relief of renal ischemia. In this view renal denervation alone should be fully effective, whereas it has no effect. Further, the view depends on renal ischemia as the efficient cause of hypertension, whereas such ischemia is not uniformly present either in experimental hypertension or in hypertension in human beings. Lastly, the operation only rarely increases renal blood flow which usually is unchanged after an otherwise satisfactory operation. The fact that renal blood flow does not usually decrease after sympathectomy when arterial pressure has fallen indicates that renal resistance must have diminished and, although without reference to the hypothesis of renal ischemia, it has also been suggested that this fact establishes a beneficial and specific effect of renal denervation. This point of view too is defective in that it ignores the normal autonomy of the renal circulation by which the kidney varies its resistance with arterial pressure in order to maintain as well as can be a normal rate of blood flow. There is no reason to suppose that this mechanism is in any way defective in hypertensives. Indeed, there is good evidence from the renal hemodynamic effects of high spinal anesthesia to establish its presence and, within limits, normal operation. The persistence of this intrinsic renal mechanism of regulation of blood flow after operation can scarcely be attributed to denervation. Sympathectomy only leaves the kidney where it was before and its effectiveness in lowering arterial pressure is therefore largely extrarenal.

We have briefly discussed sympathectomy from the viewpoint of what has added to knowledge of the mechanism of the disease. Now we would add a word as to the usefulness of the operation. There is now no doubt that when these operations are sufficiently extensive as in the technic of Smithwick and the modified Adson procedure that marked falls in both systolic and diastolic pressures occur in some patients. This is most pronounced when the patient stands erect. Indeed, postural hypotension is one of the best indices of the completeness of the operation. The length of time blood pressure remains reduced is variable. The average is perhaps from three to five years, some less and others more.

It is not unusual for regression of the morbid changes in the eyegrounds of patients with malignant hypertension to occur. And one of the most striking changes is the loss of headaches and the regaining of a sense of well being.

One of the greatest difficulties in the application of the method has been the inability to find any single or even multiple tests which will determine whether a favorable outcome is to be expected. The hypotensive effect of administration of sodium amytal has been most extensively used to ascertain the drop in pressure to be anticipated as the result of operation. Some believe that when an adequate fall in pressure does not occur, the likelihood of success is poor, but that an adequate fall is no guarantee of success. Various authors have their own criteria and it now seems to be a matter of personal experience as to how patients are selected. There is no generally accepted method of selection and this militates importantly against the usefulness of the operation.

As we said before, the precise mechanism of the action of these operations is not clear. It is not improbable that several factors play a part, among these being a reduction of venous return to the heart when the patient stands erect, as a result of denervation of extensive vascular areas. Besides this, the denervation of the large splanchnic area prevents the normal reactive vasoconstriction from occurring when the patient moves from a horizontal to an erect posture. Fainting is often observed presumably because this protective mechanism has been blocked in its action.

Thus it may be well that the overall reduction of blood pressure during the twenty-four hour period may be quite significant and the time taken away from the destructive and sclerosing effects of the elevated pressure on the blood vessels contributed towards increasing longevity.

5. *Kidney Extracts.*—The reasons for the search for substances in the kidneys which might lower blood pressure need not concern us here. Extracts of kidneys have been prepared which lower blood pressure and cause improvement in the clinical condition of patients. But the mechanism by which these extracts act is entirely unknown.

The term "nonspecific" has been employed to describe their action. This may be true in the superficial sense of the word, i. e., the lowering of pressure is due to an unknown mechanism set into action by a heterogeneous group of substances. Among these is fever, but many patients have fever without reduction in arterial pressure and a few vice versa. The important point to recognize is that if any form of therapy will lower blood pressure and benefit the patient, it does not make a great deal of difference what the mechanism is.

It is the belief of a very few investigators that certain types of extracts of kidneys have these beneficial effects, but none to date has been able to prepare an altogether suitable extract. Such a search is naturally a tedious and expensive job since patients must be the test objects and nothing is known of the chemical nature of the substance sought.

There is some evidence that suggests but does not prove some degree of specificity. Kidney extract will reverse the intrarenal hemodynamic change usual in many cases of hypertension to a more normal one. Further, cardiac output will be elevated in hypertensive patients when the mean pressure falls.

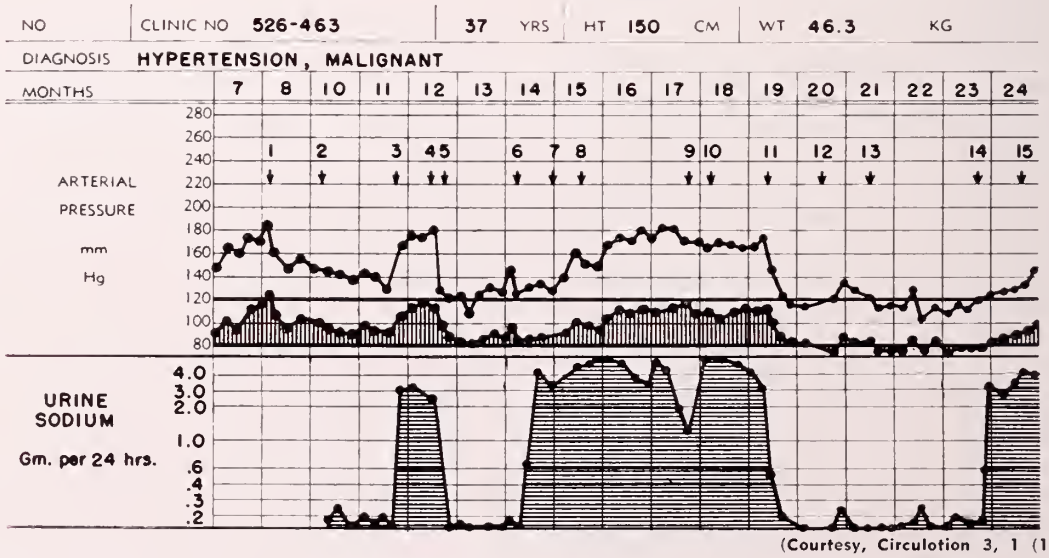
It is quite clear that work along this line is still in its embryonic stage. None can foresee its outcome, hence the desirability of not attempting to codify knowledge in this field prematurely.

6. *Excessively low sodium diets.*—The use of low sodium diets has been revived recently, but now the restriction is even more severe, often not more than 200 mg. of sodium being allowed in one day's diet. This level is extremely difficult to attain in most patients and is altogether impractical for some.

The results in our patients have been moderately encouraging. At least a quarter show significant fall in arterial pressure and some feel better. Administration of salt to these patients is associated with a rise in blood pressure. It appears that there is some association between the change in salt content of the diet and the height of the arterial pressure in these particular patients. Rarely, circulatory collapse occurs from the severe salt deprivation, hence the treatment has potential dangers. These can be exaggerated because most patients, when not in the hospital under rigorous supervision, do not keep their salt intake below 0.5 Gm.

Those of us who remember the era when low salt diets were being indiscriminately prescribed for hypertension recall that at times some lowering of pressure occurred apparently as a consequence of the low salt intake. But at that time the intake almost never went below one gram of sodium chloride. It thus remained to be determined whether the drastic restriction now suggested is really necessary. Good evidence suggests that it is. At best, relatively few patients will be benefited from drastic salt restriction but for these it may well be worth the effort.

7. *Exchange Resins.*—The use of amberlite resins has been suggested as a shortcut to a salt poor diet (Dock). Oral administration of certain types of these exchange resins should theoretically remove enough sodium from the intestinal juices to achieve the desired reduction in sodium balance. We have used a resin (Resodec: Smith, Kline and French) in which both potassium and ammonium are added to avoid possibility of potassium deficiency and to aid in the formation of ammonium chloride from the released chloride ion. Doses of 15 Gm. at mealtime three or four times a day seem adequate for patients with congestive failure but as much as 125 Gm. may be necessary to aid in the achievement of the drastic low salt diet.



(Courtesy, Circulation 3, 1 (1951))

Figure 1. The effect on arterial pressure and urinary sodium of various supplements added to a rice diet. Each dot on the blood pressure chart represents the average of 14 determinations taken twice a day for one week. The patient was constantly in the Cleveland Clinic Hospital. 1. Pyrogenic extracts; 2. rice diet; 3. The same plus 8 Gm. sodium chloride: 4. rice diet; 5. 0.2 Gm. sodium diet; 6. ward diet; 7. 5.0 Gm. sodium diet plus 6 Gm. sodium chloride; 8. 0.2 Gm. sodium diet plus 18 Gm. sodium chloride; 9. 5 Gm. sodium diet plus 5 Gm. sodium chloride; 10. the same with 10 Gm. sodium chloride; 11. rice diet; 12. readmission with hip fracture; 13. 0.2 Gm. sodium diet; 14. 2.0 Gm. sodium diet plus 4 Gm. sodium chloride and 15. the same with 8 Gm. sodium chloride.

Resins can be used only as adjuvants to the dietary control of sodium. The danger is that many patients think they can eat all the salt they want and it will be counteracted by the resin. Our experience shows that dietary sodium must be carefully controlled and that the resin will aid by removing even greater amounts of sodium and possibly protect against occasional indiscretions. It provides no simple answer to the problem of the low salt diet in the hypertensive with or without congestive failure, but used with understanding it can be an aid. If its importance is overemphasized, its usefulness may be greatly impaired.

8. *Rice Diet.*—There are few suggestions for the treatment of hypertension that have stirred so much controversy as the rice diet. Every shade of opinion currently exists. Some see in it a cure, while others view it as deserving of nothing more than casual interest. These views are colorful, even if not based on much substantial evidence. Many of us remember the extremes of view expressed fifteen years ago about sympathectomy. The approach, as one looks back upon it, contributed little to the understanding of the nature of the problem.

The rice diet and the sodium depletion diet are alike in that each yields about 2000 calories fuel value and contains less than 0.5 Gm. of sodium. They differ in their protein content which in Kempner's regimen is less than 20 Gm., and in Kempner's assumption that other foods contain unidentified toxic substances which are not present in rice and which embarrass the kidneys.

In 1944, Kempner first reported on the use of the rice diet. It contains 2000 calories, not more than 5 Gm. of fat, 20 Gm. of protein, 200 mg. of chloride and 150 mg. of sodium. Rice 250 to 350 Gm. (dry weight) is taken daily. All fruits are allowed except nuts, dates, avocados, dried or canned fruit, or fruit derivatives to which substances other than white sugar have been added. Not more than 1 banana may be taken a day. White sugar and dextrose are allowed ad libitum; on the average, a patient takes about 100 Gm. daily but if necessary as much as 500 Gm. may be used. Tomato and vegetable juices are not allowed. Usually no water is given and the fluid intake is limited to 700 to 1000 cc. of fruit juice per day. Supplementary vitamins are added—vitamin A, 5000 units, D, 1000 units; thiamin chloride 5 mg.; riboflavin 5 mg.; niacinamide 25 mg.; calcium pantothenate 2 mg. Some form of iron is desirable. Rest in bed is neither necessary nor desirable. Weight may decrease markedly during the first twenty days.

Our own experience with the rice diet has been limited to some 50 patients. Some of them would not stay on the diet because of its monotony. Among those that did so after a prolonged control period, effects on the blood pressure have not been nearly so impressive as when the diet was started shortly after coming under our care. A fall in renal blood flow occurred in many and in a few has not seemed to be reversible. The eyegrounds of one patient cleared perhaps as a result of the diet, but this cannot be proved. Thus, it is our view that the diet deserves much more careful study before its wide popularization by some of the leading clinics of the country. Our studies over the past several years strongly suggest, if indeed they do not prove, that the rice diet is essentially a low sodium diet. When blood pressure falls during its use, the addition of salt again raises pressure.

One of the essential safeguards least employed is an adequate control period, and this in the face of the common experience that the level of arterial pressure may drop by 50 mm. Hg. or more during the first few weeks of patient-physician contact. Casual blood pressure readings over even many years, however, do not replace as controls frequent measurements before and during the periods of dietary control. Another factor in prescribing the diet is the patient's enthusiasm for it. Very often he can be persuaded to try it only by promises of relief or threats of serious complications which few physicians can conscientiously subscribe to. Still, some encouragement may be necessary, for it is only the rare patient who will take a detached and scientific view of a rigid dietary scheme.

The effects of weight loss due to the diet have not been adequately evaluated. European experience during the war suggests that these play a much more important part in determining the decrease in arterial pressure than deprivation of animal portein and provision of protein of vegetable origin.

Finally, in the presentation of data, it should be remembered that essential hypertension is a disease with an extraordinarily variable course, so that composite smoothed curves carry little meaning or conviction. Rather, the aim should be to present well documented studies of individual cases in which the factor of sodium loss, weight loss, hypometabolism, fluid shift and, above all, the variability of arterial pressure under control conditions are presented in detail.

9. *Veratrum Alkaloids.*—In the past several years partially purified veratrum alkaloids have become available commercially. Our own ex-

Figure II

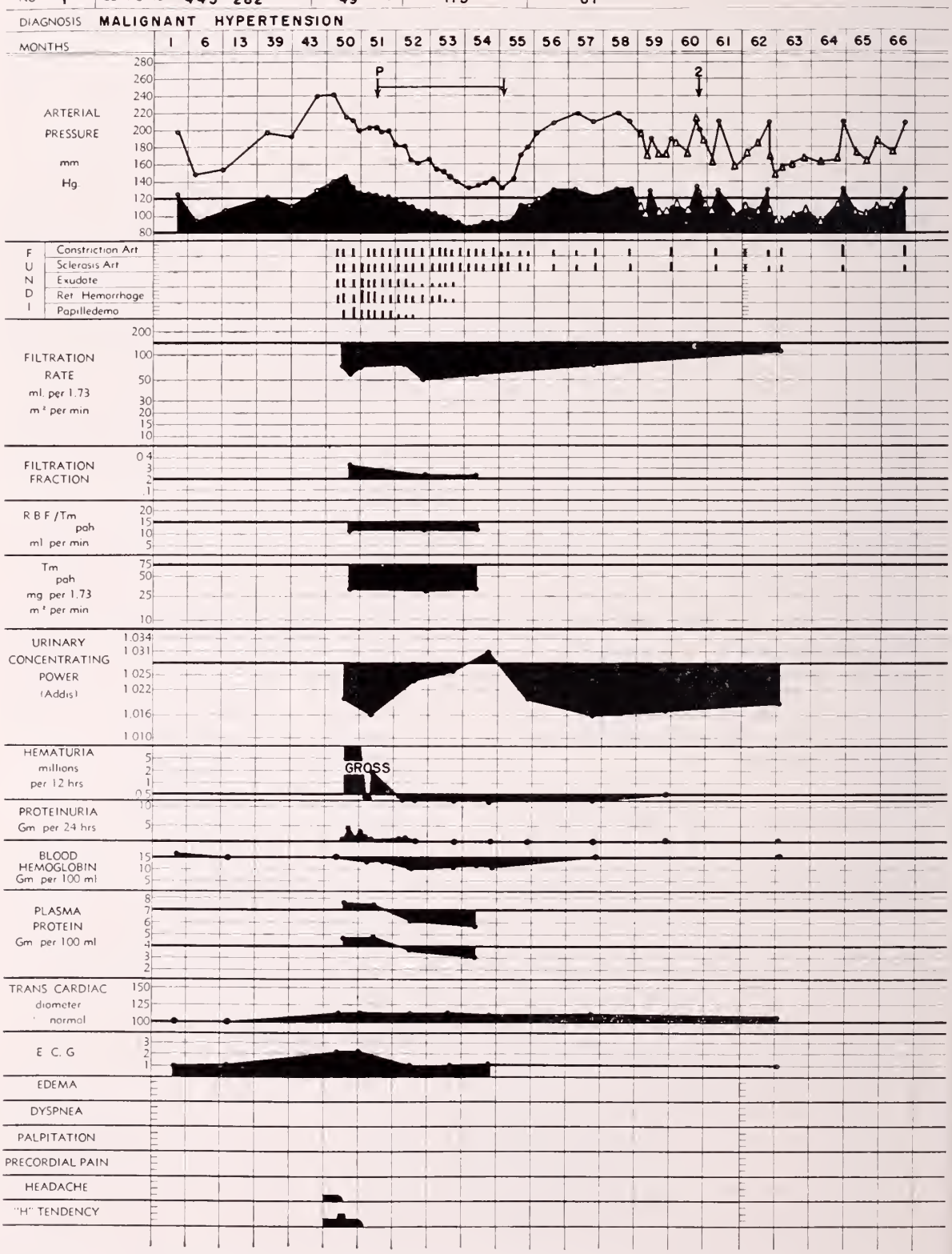


Figure 2. The effect pyrogen therapy an o potient with severe mal'gnant hypertension. At P the pyrogen was injected 6 doys a week. At the orrow it was discontinued. The eyegraunds cleared os shown under "Fundi." It will be noted that after discontinuing treatment bload pressure rose but the malignant phose did nat reappear. At 2, Verilaid treatment was begun. The patient returned ta work twa years ago.

perience has been with "Veriloid" (Riker Chemical Company).

It must, in most cases, be given up to tolerance level and this usually is indicated by a burning, constricting feeling in the neck and by nausea and vomiting. Less often severe fall in arterial pressure occurs. Atropine does not aid significantly in preventing these difficulties nor does its administration by rectum. Phenobarbital simultaneously administered appears to aid somewhat.

Our experience has been that the drug has a limited usefulness. A few patients are remarkably benefited, many have a moderate and significant fall in blood pressure, but a large residue are not helped. There is no way so far devised to select the patients that will respond. Thus, in our opinion, these alkaloids may be used in the search for patients who respond dramatically and for those exhibiting significant fall in pressure. Unfortunately, the dramatic responses may not last for more than a few months when increasing tolerance appears.

10. *Pentamethonium Iodide* (C_5).—Our experience with this drug has been very limited as has apparently that of others. Combining experiences with others, I have come to the opinion that it is another drug aiding the search for a satisfactory blocking agent. Like tetraethylammonium chloride (TEAC), it blocks at the autonomic ganglion.

The drug can be given by vein, subcutaneously, or by mouth. It produces less side-effects than TEAC and the blockade lasts longer. Postural hypotension may be disturbing and intestinal gas may cause much discomfort. Like most of the other hypotensive drugs tried the effects are erratic. I constantly wonder whether this is not due to the widely varied etiologic mosaic which we try to correct all with one remedy.

11. *Bacterial Pyrogens in the Treatment of Malignant Hypertension.*—Daily administration of concentrated bacterial pyrogens, especially those from *B. prodigiosus*, over periods of weeks to months, often causes remarkable clearing of the pathologic changes in the eyegrounds of malignant hypertensives. Thus in a series of patients average arterial pressure, systolic and diastolic, was reduced from a mean of 126 to 100 mm. Hg. Papilledema disappeared in all but two and fresh exudates disappeared. Improvement was noted also in the electrocardiogram and the heart size diminished.

Except for the persistent elevation of arterial pressure, remissions have lasted for an average of three years. Of the remaining 19 patients, 11 responded more briefly while 8 showed no change. All but two of these are dead and these two are presently under treatment.

The greatest drawback in the treatment is that tolerance to the pyrogen usually appears in from five to nineteen weeks after which arterial pressure usually rises to the control levels but without reappearance of the malignant syndrome.

It has not been possible to select those patients who will respond to pyrogen therapy. Six patients who were virtually blind and four who had congestive failure responded favorably. In general, it appears that if renal excretory function is reduced by 50 per cent or more, the response will be poor or at least more than temporary.

This treatment must be regarded as experimental until more experience has been gained. In view of the gravity of the disease, the results so far obtained justify its further use when the patient can be under the daily care of the physician.

CONCLUSIONS

Views on the nature and treatment of diseases of the circulation, arterial hypertension in particular, are rapidly changing. The pessimism of 20 years ago is giving way to the hope that with increased understanding of the mechanism of these diseases cure may ultimately be achieved. Cure is rarely achieved today but much can be done to ameliorate the disease.

Treatment must cover a wide variety of signs or symptoms because blood vessels are affected in most parts of the body. No highly specific remedies which will lower blood pressure are available but the discerning use of several agents leads to far greater comfort for the patient and doubtless in many cases to prolongation of life.

BRONCHIAL ASTHMA AND FOOD ALLERGY

Bronchial asthma has long been recognized to be a result of allergy. The type of allergy, however, is thought by many physicians to be an inhalant. That bronchial asthma also results from ingestion of certain foods to which the individual is sensitive is being recognized more and more.

In the study of the bronchial asthma patient, if satisfactory relief is not obtained after inhalant investigation and treatment, specific food allergy studies should be made. Frequently inhalant and ingestant sensitivity is present in the same individual, and complete relief is obtained only after each sensitivity is diagnosed and subsequently treated or controlled. Prevention of the asthma is much more satisfactory than treatment.—Clyde K. Walter, M. D., in Ohio St. Med. Journal.

THYROIDITIS: CONCEPTS OF MANAGEMENT*†

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and
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It is classic to say that thyroiditis is rare. Means put the incidence at approximately one per cent of cases having thyroid disease.[32, 33] Like other inflammations the disorder is certainly ubiquitous yet it is thought that thyroiditis is more frequent in those regions in which goiter is not endemic;[10, 24] thus, in Switzerland, the great pioneer Kocher was said never to have seen a case. The disease may preponderate somewhat in America, Central Europe, the United Kingdom and Japan.[24] Whether actually from a greater incidence or from better recognition of the thyroid inflammation syndrome an increase in thyroiditis has been noted in recent years.[8, 11, 23, 24]

Reports on thyroiditis have come chiefly from the West, Midwest and New England in this country, and from Britain and Germany abroad. No extensive review of the disease as it affects the population in the South has appeared in the literature. In 1945, Jelks described two cases of thyroiditis[22]; Davison and Letton[11] contributed twenty-eight cases of Hashimoto's struma in 1949, gathered during an interval of the preceding fifteen years.

At Duke Hospital we have collected sixty-three cases of thyroiditis out of 2,685 cases of thyroid disease admitted over a twenty year period, 1930-1949 inclusive, an incidence of 2.3 per cent. Twenty-three cases were not included because of insufficient history, clinical or laboratory data, because of unsatisfactory follow-up, or because of other associated disease. Hence the incidence is, no doubt, higher than the 2.3 per cent proposed. The habitat of these patients has been the Carolinas for the most part, with a sprinkling of patients from adjoining states.

Classification: Associated Causes.—Thyroiditis is the generic term that has survived the spate of nomenclature flooding the literature since the close of the 19th Century. The title includes at least three distinct clinical entities characterized by thyroid enlargement without histologic or clinical evidence of true tumor. One of these, the pseudo giant cell type, described by De Quervain in 1904, presents a varying intensity of onset from acute to insidious, usually subacute, which Crile lumps into a single disease complex.[6] That this is a true thyroiditis, no one now seems to doubt. The infectious agents ascribed are numerous [7, 10, 33] but in only one of our cases was there a postive culture from the thyroid gland (see tabulated list).

Our belief is that the thyroid, though less likely than most tissues to become inflamed, may be the seat of infection like any other gland, though its reaction to invasion is unique. With respect to subacute or pseudotuberculous thyroiditis it is easier to associate than prove the cause: for example, in 70 per cent of our series there was a history of previous respiratory, dental or other accompanying infection, and at times there was observed a cervical adenitis.

Rienhoff[39], basing his opinion on the work of King, believes that there is a retrograde spread of infection from the nasopharynx to the thyroid through the lymph channels, and points out that King as early as 1938 emphasized in thyroid inflammation this manner of virus spread which is receiving so much attention today[8, 32, 35]. In contradistinction, the other two forms, struma lymphomatosa and fibrosa, are marked by chronicity, and the exciting factors are unknown.

The diseases of Hashimoto and Riedel are the hobgoblins of the etiologist. On the cause of Riedel's perithyroiditis most authors are silent, while all writers in the last decade, speculating as to the origin of Hashimoto's struma, are assured that whatever else it may be, the disorder is not inflammatory[5, 11, 18, 19, 24, 28, 40]. Nonetheless it is usual for texts to classify these three syndromes under the caption of thyroiditis—a

TABULATED LIST

Typhoid	Malaria
Pneumonia	Smallpox
Tonsillitis	Influenza
Puerperal Infection	Cholera
Gastroenteritis	Dysentery
Scarlatina	Rheumatism
Diphtheria	Trauma
Measles	Tuberculosis
Mumps	Syphilis

After Andre Crotti[10]

Echinococcus—Von Eiselsberg, Germany
—Vitrac, France
Actinomycosis—Kohler, Germany
Quoted by Rienhoff[39]

South American Trypanosomiasis (Chagas' Disease). Causative agent. Trypanosoma Cruzi Vector: Triatoma Megistus. Brazil only.

Chagas, cited by Means and Richardson[33]

Diseases in which thyroiditis has been known to occur clearing up when there was a specific treatment (e. g., arsenic in lues, quinine in malaria).

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practice that will perhaps continue for some time to come.

SUBACUTE OR PSEUDO GIANT CELL THYROIDITIS

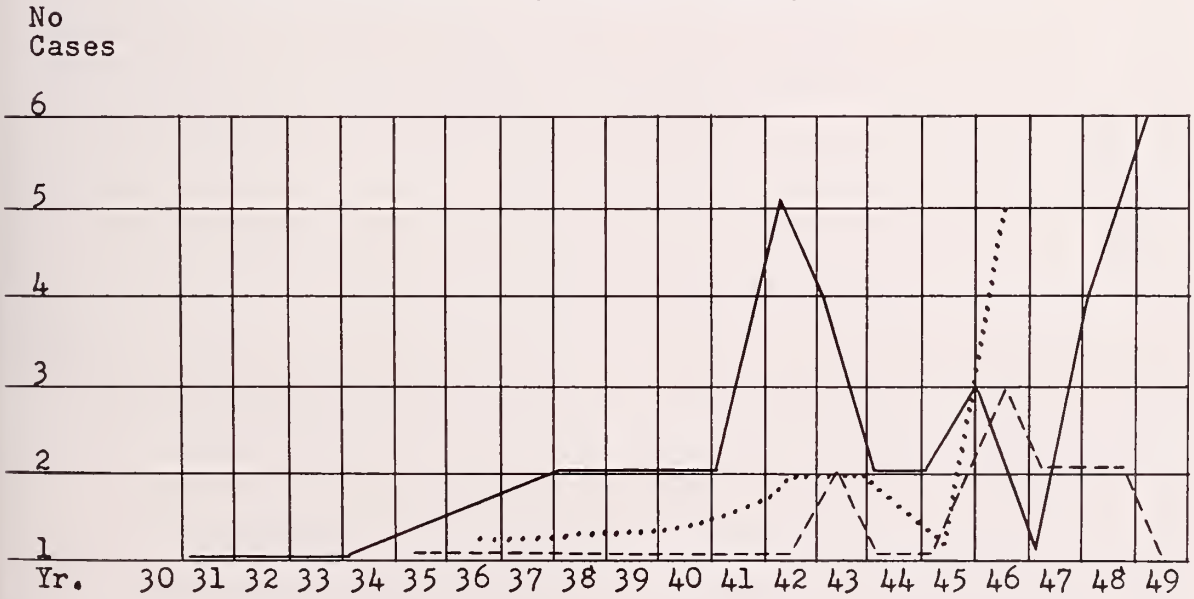
Clinical Picture.—The diagnosis in this type of struma in the words of Crile[9], is unmistakable with or without biopsy, and of 27 cases, he reported that his first examiners correctly called 21. The patient usually is a woman (our ratio was 9 to 1) over 25 years of age and under 50 (extremes we found were 22 and 74); the proportion of negro patients to white we reckoned at 1:5 but since the admission of colored to white patients at Duke Hospital is in the same approximate ratio (1:5.8) the distribution appeared even for both races. Of the three forms of struma, subacute thyroiditis is by far the most frequent, constituting over half, or 36 of our series of cases at Duke Hospital, as against 15 cases of Riedel's and 12 of the Hashimoto type, and of the 23 rejected group, 20 were ostensibly pseudotuberculous.

In the pseudo giant cell type there is a history of preceding nasopharyngeal or oral infection (70 per cent), there is a history of illness or indisposition for some weeks, which may be longer if there have been several episodes, and a history of characteristic pain radiating from the thyroid gland to the ear, jaw or occiput of the affected side. Fever is or has been present in every instance, often with concomitant chill; the fever may vary between 100 to 104 F., and shows a spiking configuration. Firm enlargement of the thyroid is noted without stony hardness and is invariable. Tenderness depends much on the stage in which the disease is seen, being exquisite when fresh-blown, but even in the chronic or subsiding form is quite definite. Enlargement is often greater on one side, with or without isthmus involvement, and at times the gland may be hot and swollen throughout. The basal metabolic rate is never out of normal range; there may or may not be a slight elevation of the leucocyte count; the most consistent laboratory finding, however, is the elevated sedimentation rate, stated by Rumsey and Crile to be as high as or higher than that seen in any other infection.[8] Our average rate was 40 mm.; our highest rate 55.

Pathology: Difficulty Obtaining Sections.—Specimens coming to histologic examination show a diffuse round cell infiltration and numerous pseudo giant cells, the latter having resulted from the reaction of the thyroid gland to the irritating colloid which has spilled out of or through the altered membrane of the reduced follicle[6, 8, 40]. Though the mortality of the disease is nil, for it eventually subsides, subacute

GRAPH SHOWING

THE INCIDENCE OF THREE TYPES THYROIDITIS OCCURRING AT DUKE HOSPITAL IN THE PARTICULAR YEAR, BETWEEN 1930-1949, INCLUSIVE



Subacute Clinical Thyroiditis ————————
Riedel's - - - - - - -
Hashimoto's . . . . . .

Progressive tendency to increase in incidence in last decade. Two cases seen in 1950 had previous attack in 1949 and listed as such. Distribution shows greatest incidence of Hashimoto's during the war years, average onset occurring three years prior to admission. Cf. report of Davison and Letton.[11]

thyroiditis often is neglected, may run a protracted course, and has a marked tendency to recur. The duration of illness in our average case was over two months, with considerable disability. One patient had symptoms for over a year, having so many episodes that she was not able to give the exact number of exacerbations. Almost one-half the cases gave an account of recurrence, either before or after treatment.

On patients presenting this picture, surgeons do not wish to operate since the inflammation spontaneously regresses, and hence these patients commonly do not come to biopsy, exploration or necropsy[6,29], nor from the clinical view and perspective of diagnosis is such essential. From the patient's view biopsy is an object of dread, and may be refused. When there is uncertainty the procedure can be done with the liver puncture needle of Silverman, as advocated lately by Portmann and Osmond [35], and by others, a type of biopsy in keeping with the lack of gravity of the affection. Chronic giant cell thyroiditis may be pathologically indistinguishable from Riedel's or Hashimoto's disease; in this event decision must depend on the gross findings at operation and the clinical picture as a whole.

STRUMA LYMPHOMATOSA

Hashimoto's disease is now generally accepted as a clinicopathologic entity, but the histologic criteria vary widely, and microscopic diagnosis depends much on the views of the individual examiner. To such an extent is this true that the number of actual cases occuring since Hashimoto's original report in 1912 is uncertain, although a late review puts the figure at 200[18]. The position taken by Ewing in 1922, that lymphadenoid goitre was an early stage of Riedel's disease, remained unassailable for a decade; credit for differentiating anew these two distinct syndromes and reclarifying them goes to several investigators, but particularly to Allen Graham[19, 20]. In his many contributions Graham helped to establish standards in pathology for designating lymphadenoid goitre, and he was the first to enunciate clearly the necessity of correlating the clinical and histologic findings in arriving at a diagnosis[19].

Clinical Picture.—Struma lymphomatosa is a chronic disorder of the thyroid, of unknown cause, with prodromal psychosomatic symptoms, diffuse, nontender swelling of the gland which is firm but without stony hardness, and a history of mild neck pressure symptoms (such as dysphagia and hoarseness), weight loss and disability. The acute symptoms of fever, chill, rapid respiratory rate, prostration, are all absent, but the pulse rate may at times be elevated. The disease is followed by myxedema in the majority of cases. A smaller proportion shows recurrences after surgery, and probably no patient with the disorder ever returns to her previously normal emotional state. Almost all cases (95 per cent) have been in women. Our cases showed an average age of 36.6 years with extremes of 23 and 53, which is well below the usual age incidence in the literature which is stated as the fourth and fifth decades[6, 31, 40], but in keeping with the mean age of 37.7 years of Davison's series in Atlanta[11].

It must be remembered that Hashimoto's struma is not always a disease of the decline. Crotti and Joll cite a case of the disorder in a child aged 10 years, and Bogart[3] mentions another in a negro girl of 14. One of our cases recorded at Duke Hospital as Hashimoto's disease in a white female of eight years we rejected upon review of the sections. Bogart's patient is the only instance of Hashimoto's disease in a negro which we have been able to find in the literature. Personal communications from Marshall of the Lahey Clinic (78 cases)[29], Davison (28 cases)[11], and Lehman of Philadelphia (23 cases)[27] indicate that re-examination of their material shows no negroes in their series of cases of Hashimoto's struma. Morbid anatomy is essentially that of intensive lymphoid infiltration of the thyroid parenchyma with atrophy of the acini and degeneration of the epithelium.

In distinguishing struma lymphomatosa from chronic pseudo giant cell variant, some pathologists stress the importance of the degenerated thyroid epithelium, some the germinal center, and others the degree of lymphoid tissue present. At operation the gland, enlarged to three or four times its normal size, is commonly found compressing the trachea but, in contrast to Riedel's disease, there is no adherence to capsule and outside structures, a point of differentiation often more valuable than the histologic changes.

Commentary.—Table III shows the considerable chronicity of our 12 cases, with average duration of illness 3½ years, in contrast to the average duration given by Gilchrist[16] of 14 months and by Crile of 20 months[6]. One of our patients had had symptoms for 12 years, which is indeed long, but a duration of even 32 years has been reported[31]. Weight loss was consistent in our series, the average being 11 pounds. Three cases we believe represented recurrences: one a patient on whom previous thyroidectomy had been done for Hashimoto's, another in which there was a definite return of the gland swelling and identical symptoms as before though somewhat mitigated, and a third in which the patient

wrote an accurate description of recurrence five years after subtotal thyroidectomy but could not be located afterwards. The last patient also had two distinct episodes before operation.

Our incidence of hypothyroidism after subtotal thyroidectomy was 25 per cent, which approximates the very low range noted by Davison in Georgia[11] of 9 out of 28, which is a far cry from the high incidence of postoperative myxedema reported by others. Thus Gilchrist[16] found that 58 per cent of patients operated on for Hashimoto's struma had subsequent hypothyroidism. McClintock and Wright estimated that three-fourths of their patients had postoperative myxedema, and hypothyroidism in 14 out of their 15 cases of surgically treated Hashimoto's disease was reported by McSwain, Barton and Moore[31]. During a postoperative interval of from 3 to 14 years, 9 of our 12 patients had maintained marked psychosomatic symptoms.

STRUMA FIBROSA

Similar to Hashimoto's struma in its chronicity, woody thyroiditis is distinctly different from it otherwise, and has emerged as a clincopathologic entity[6, 15, 26, 30] from the chaos of medical writing on thyroid inflammation since 1896, when Riedel so effectively pictured the condition bearing his name. As well as being a thyroiditis, it is also a perithyroiditis, but whether the inflammation starts in the thyroid itself or in surrounding tissues as urged by De Courcy[12] no one can affirm. The causative agents and their mode of invasion are entirely recondite.

De Courcy[12] contends with more reason than proof that an initial perithyroiditis induces a constriction of the thyroid vessels and associated blood channels, and causes ischemia of the thyroid gland with resulting formation of iron-hard tissue so characteristic of the disease. Cut specimens of the gland show heavy fibrous infiltration of the entire organ, with reduction and scattering of the acini. The fibrosis seems to strangle the parenchyma, as Foot says picturesquely. The scar tissue is quite dense, and always reaches beyond the gland into the capsule. In a typical specimens this is a distinguishing point, since pseudo giant cells may be present microscopically in Riedel's disease and, when the fibrosis is not marked, sections of the latter may resemble pathologically those of chronic giant cell thyroiditis. Few believe now, however, that Riedel's affection is an end stage of giant cell struma, the Lahey group being an exception.[29]

Table I

CLINICAL SUBACUTE THYROIDITIS, IRRADIATED

(15 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	Duration Illness	Infection or Adenitis	Subsequent Recurrence	Hosp. Days	Amt. Treat.	Remarks
A90658 '42	49 W	Swollen T.; radiating pain; fever	24 lbs.	1 mo.	No	None	15	750 r	Gauze left in wound at biopsy; removed 2 wks. later. No. T. symptoms. Psychosomatic
A64443 '42	48 W	Swollen T.; radiating pain; fever	Few lbs.	17 days	Yes	None	3	400 r	Later yrs. GYN CC & mastitis; no further T. symptoms
64641 '49	35 W	Swollen T.; low-grade fever	slight	46 days	Yes both	°	11	900 r	2 wks after Rx gland began to shrink. Work full time 5/24/50
B6320 '43	35 W	Swollen T.; fever	Yes	49 days	Yes	No	7	650 r	2 wks T. regressed. No T. symptoms; psychosomatic
C68974 '49	54 C	Swollen T.; hist. fever (now subsiding)	14 lbs.	57 days	Yes	No	15[1]	550 r	2 wks. after treatment recession. No T. symptoms; no psychosomatic symptoms
A98081 '44	28 C	Swollen T.; fever	Yes	21 days	Yes	No	7[1]	600 r	2 wks after treatment gland receded. No post T.; no psychosomatic symptoms
C76975 '49	33 W	Swollen T.; fever; chills	10 lbs.	64 days	Yes	° 1 recurrence 10 days	12	1050 r	Slow recovery. Tenderness left in 10 days; swelling left in 3 wks. Recurrence 4 / 15 / 50, lasted 10 days and spontaneously cured
85600 '42	42 WM	Swollen T.; fever; chills	Yes	72 days	Yes (Vincent's)	°	5	500 r (chill after 1st dose 200 r)	Doing well. No T. symtoms; no psychosomatic symptoms

Clinical Picture.—The salient features of the disorder clinically are: (1) the *eisenharte* or iron-hard nontender swelling of the thyroid without distortion of the gland contour, with adherence to contiguous structures and (2) a sensation of choking. In point of time, the asphyxia precedes the enlargement in contrast to the Hashimoto type.[40] This ligneous or woody hardness of the involved tyroid is found in only one other condition, carcinoma, from which it must be distinguished. The latter distorts the thyroid configuration usually, but since surgical interference is the only curative measure, diagnosis is confirmed commonly on the operating table and established later by histologic study. As already mentioned, the symptoms are chronic, as in Hashimoto's struma; the metbolic rate does not exceed the usual limits, and the temperature, respiration and pulse rate are normal. The only acute aspect of Riedel's disease is the urgency of relief from strangulation.

Incidence and Comment.—Since these two forms of slowly evolving struma have long been confused, the incidence of Riedel's struma is difficult to assess. In 1935 Gordon Lee[26] culled 90 cases from the literature and there has been apparently no general review since then, although several small series have been contributed by various observers from time to time. Joll[24] reported Riedel's disease to Hashimoto's in the ratio of 1 to 5, Schilling[40] and J. Graham (quoted by Joll[24]) in identical ratios of 2:6, thus indicating that Riedel's struma is the rarest of the three types of thyroiditis.

We wish to add to the collection in the literature fifteen cases from Duke Hospital, sections of which have been rechecked by the pathology staff (table IV). The duration of illness of approximately 2½ years, although shorter than that in Hashimoto's disease, appears far longer than the standard estimates. Gilchrist, for example,

Table I—(Continued)

CLINICAL SUBACUTE THYROIDITIS, IRRADIATED

(15 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	Duration Illness	Infection or Adenitis	Subsequent Recurrence	Hosp. Days	Amt. Treat.	Remarks
B53921 '45	32 W	Swollen T.; fever; chill	No	17 days	Yes	No	3	300 r	No T. Symptoms; no psychosomatic
83438 3/50	22 W	Swollen T.; fever; chill; radiating pain	No	24 days	No	1 recurrence 9 days	10	550 r	Overexerted self (house work). After recurrence 4/16 was O. K.
73867 '42	47 W	Swollen T.; fever	Yes	56 days	No	1 recurrence 7 days	7	300 r (1st Rx) not suf. 200 r (2 nd)	6/3/42 psychosomatic; confirmed '44 & '49
B6029 '45	66 W	Fever (spike); swollen gland	10 lbs.	40 days	No	No	10	300 r	10 days after Rx gland swelling disappeared. Cataracts in '47. No T.; no psychosomatic.
69666 46	26 W	Swollen gland; fever	No	59 days	Yes both	Post recurrence (6/3/-48 1 wk. after 2 years)	10	500 r	One recurrence lasting 7 days. O. K. in '49
B6519 '43	49 W	History fever; radiating pain; swollen gland	30 lbs	4 mos.	No	No	9[2]	600 r	Tenderness left in 3 weeks; swelling left in 6 weeks
C88059 5/50	45 W	Fever, chills; swollen T.	5 lbs.	6 mos.	Yes	° °	7	450 r	No recurrence to date. Too early to follow.
Average	13 W 2 C 41 Yr.	Fever 15 Goiter 15 Chills 5 Rad. pain 4	on 12 cases Est. Ave. 11 lbs. loss No wt. loss for 3	56.7	Hist. inf. 10 Adenitis 2 No his. inf. 5	Recurrence: 4 cases (26.7%) Cases, more than 1 subq. recurrence: 0 Cases prior recurrence 2 (no subq.)	8.7	587 r	

1. On account of bed shortage, the two colored patients were carried in O. P. Hospitalization time reckoned from beginning of treatment to date of dismissal.
2. After therapy with sedation, sulfathiazole and other forms of treatment, with no amelioration, patient started on irradiation 6/29/43—21 days after admission. Time reckoned from date roentgen therapy was initiated.

° Oue prior attack before hospitalization and treatment.

° ° 4-5 previous attacks.

NOTE: All BMR estimates within normal limits (+20; −20). All sedimentation rates elevated (40 mm average elevation for all patients). All serology reports negative. Other lab. findings, together with blood picture, negative. One male only indicated by "M". Public health nurses assisted in follow-up.

Table II

CLINICAL SUBACUTE THYROIDITIS, NOT IRRADIATED

(21 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	Hosp. Days	Duration Illness	Infection or Adenitis	Subsequent Recurrence	Type Treat.	Remarks
61782 '41	42 W	Swelling neck; fever; chill; radiating pain	Uncertain	5	3½ mos.	Yes pharyngitis	No	Sedation; bed rest	7-14 days in bed after discharge. Rechecked 5 yrs. '45
98457 '38	22 W	Swelling neck; fever; chill; radiating pain; dysphagia	Not noted	15	24 days	Yes URI	Yes°	Ice collar; narcotics; bed rest	Well, 3 mos. Recurrence, readmission to hosp. Suppurative — checked '39. '40 well—del. normal baby.
A8011 '38	60 WM	Swelling neck; fever; dysphagia	Not noted	11	10 mos.	Yes tonsillitis	Yes "several" 1 yr.	Sedation; bed rest; saline compresses	Aspirated T. — culture positive for Staph. Aureus
4705 '33	42 CM	Swelling neck; fever	Uncertain	10	7 wks.	Yes sore throat	No	Ice collar; saline compresses; bed rest	Advised to continue Rx at home 1 wk. No aftermath ('48)
A22597 '39	30 W	Swelling neck; radiating pain; fever	25 lbs.	23	2 mos.	Yes tonsillitis	No	4.8 gm. daily of sulfa, 7 da.	Tonsillectomy 2 mos. later (readmission). No further trouble
A18999 '39	28 W	Lump in neck; fever	Yes—down to 87 lbs.	5	4 mos.	Cervical adenitis	Yes	Bed rest; sedation; refused biopsy	Seen 20 days after discharge — gland reduced 1/3 in size. Gained 6 lbs. Recurrence '41
5464 '31	41 W	Swelling neck; fever	Uncertain	15	4½ mos.	Yes sore throat	No°	Ice collar; luminal	No aftermath; constant headaches
35379 '34	53 C	Fever; swelling; radiating pain; dysphagia	Probably	20	41 days	Yes sore throat	Unknown	Bed rest; sedation	No follow up. P. H. Nurse unable to locate
A90941 '42	42 C	Swelling; fever radiating pain	7 lbs.	17	117 days	Sore throat	Yes°	Sulfathiazole gm. 6/da. for 22 gm.	Seen 11/10 not free of symptoms. Attack of sore throat again & recurrence 1/10/45 — 3 wks long
'43	61 WM	Swelling neck; fever	Def. loss of wt.	21	56 days	Yes Adenitis URI	Yes	Sulfathiazole gm. 4 q day for 7 days	Afebrile & a symptomatic on discharge—2 da. after recurrence, readmitted. Abscess drained, recovered. No further trouble until '47 when hosp. for T B c
A57970 '41	74 W	Swelling neck; chills; fever; very tender	None	13	30 days	None	No	Bed rest; sedatives	Seen in '44 for spinal arthritis. Reported deceased (senility) in '50
7256 '43	30 W	Swelling neck; fever; chill; radiating pain	20 lbs.	12	3 mos.	No	No	Sedation; ice collar	T. Ext. during convalescence. Stopped later. Nor. delivery '46. O. K. '50
A45950 '44	36 W	Swelling neck; fever; radiating pain	20 lbs.	14	8 wks.	No	No	Sulfadiazene 5 gm. for 2 days	For 1st 3 wks. rt. side involved, then left side for 3 wks. No aftermath
B621 '46	46 W	Swelling neck; chills; fever	Probably	10	58 days	Malaria (prev. hosp.)	Yes 2 prior hosp. adm. & diagnosis	Penicillin; Thiouracil; Quinine	3 attacks, all told, 3 hosp. adm. Pos. for plasmodia (prev. hosp). In '50 reported O. K.
71659 '46	44 C	Enlargement T.; chills; fever	No	5	1 mo.	Yes sore throat	Unknown	40,000 U. penicillin. Follow-up doses	Urticaria. No other follow-up. P. H. Nurse could not locate
C25934 '48	57 W	Enlarged T.; fever; radiating pain	Uncertain	9	1 yr.	Cervical Adenitis	Yes 4-5 through '48 °	Bed rest & 2 wks. at home	Several (4-5) attacks in remainder of yr. '48: "less frequent" episodes in '49. Last attack 9/49, pain in T., fever

gives eleven months,[16] and Means[32] computes the average at 7 months 10 days. Our incidence of postoperative hypothyroidism in Riedel's disease equalled that observed in our Hashimoto series, but it is the low postoperative myxedema rate in the latter which is remarkable. There were no deaths nor recurrences in our series, yet in half the cases incurable psychosomatic symptoms developed later.

CONCEPTS OF MANAGEMENT

Subacute Thyoiditis.—Because it is self-limiting, giant cell thyroiditis frequently is neglected. It often is allowed to run its course for weeks or even months with one or more recurrences resulting in time loss, emotional unrest, or exhaustion for the patient. Confinement to bed is essential, regardless of other therapy employed but it is complacency to use this as a sole means of cure. Sedatives, like bed rest, have long been a valuable aid since the patient often is naturally tense and becomes more so with the disease. Sulfonamides and, later, the antibiotics, were used on the reasonable assumption that the disorder was infectious. The sulfonamides have since been abandoned as utterly worthless, and although penicillin has less side-effects, it has not proved beneficial.[25, 35] Thiouracil and other antithyroid agents seem to be helpful but tend to cause agranulocytosis; in addition, recent experiments in animals have suggested that their mode of action may produce benign tyroid tumor formation.[34] In the chronic cases in which surgeons have been willing to operate the results have been uniformly good[6] but there is no inclination to operate on the subacutely ill. Even in the long standing cases, however, surgical intervention as a form of treatment is assuredly robust. Crile says for example that most of the patients having this malady and subjected to operation at his clinic were seen before the value of x-ray was recognized.[6].

Radiation therapy in our hands has been highly satisfactory. In the twenty year period we have used x-ray treatment in 15 of the 36 hospital cases presented here, in addition to

Table II—(Continued)

CLINICAL SUBACUTE THYROIDITIS, NOT IRRADIATED

(21 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	Hosp. Days	Duration Illness	Infection or Adenitis	Subsequent Recurrence	Type Treat.	Remarks
C29133 '48	40 W	Enlarged T.; radiating pain; episodes with mensis	No	7	3 mos.	Assoc. mensis; deflected septum	Yes °°	Sedation	Letter 6/50 advised take bed rest at home. Submucuous resection on 11/12. O. K. after that; recurrence with each coryza
C47874 '48	44 W	Enlarged T.; constant fever	No	10	40 days	Yes sore throat	No	300,000 U. penicillin daily 7 days. Phenobarbital; Propylthiouracil; Lugol's	No aftermath (June '50 High BP)
C3421 '47	24 W	Swelling neck; slight fever; dysphagia; nervousness	5 lbs.	10	6 mos.	No	No	Resection	Sl. fever 99° after discharge. Aftermath none —nervousness better
A31142 '49	35 C	Lump in neck; mild fever; radiating pain	5-6 lbs.	7	120 days	Yes sore throat	No °°	100,000 U. penicillin q-3 hrs. 5 days	3 episodes all told. Biopsy of isthmus only. No later recurrence
C45678 '48	40 W	Enlargement T.; choking	10 lbs.	7	15 days	No	No	Resection	No aftermath, "no trouble whatever" (6/50)
Averages	16 W 5 C 3 M	Enlargement T. 21 Fever 19 Rad. pain 10 Chill 10 Dysphagia 5	Est. Av. 10.3	11.4	3½ mos.	15 cases none in 6	38% (8 cases)		

° One previous attack (98457, 10 years previously; C25934, 12 years previously, hospitalized 6 weeks).
°° More than one previous attack.
NOTE: All cases had BMR within normal limits (of +20, −20); all serology reports negative; all sed. rates elevated (average 39.2 mm); other laboratory findings insignificant. 8 cases had recurrence: of these 2 had more than one recurrent episode after treatment. Of these 8 having recurrences, 3 had had previous attacks before hospitalization at Duke. All males indicated by "M"; all others females. Puhlic health nurses assisted in follow-up.

other referrals and other patients on an outside basis. Crile, who at the Cleveland Clinic now uses roentgen therapy altogether for subacute thyroiditis issued a report in 1950 on 38 cases successfully treated.[8] The thyroidologist Means[32] advocates the use of x-ray (1946) and Barr, in 1947, placed radiation therapy first in the management of thyroiditis.[2] Schilling, whose comprehensive review of the whole subject was published in 1945, argues the difficulty of computing the value of any agent in a disorder so unpredictable as giant cell struma but states that radiation treatment is well warranted.[40] Outstanding radiologists employing the method are Kelly,[25] Portmann[36] and Hare.[21] With Osmond, Portmann reported in 1949, 55 cases irradiated, with excellent results.[35]

Table I and II show a breakdown of the 15 cases irradiated at Duke Hospital as against 21 cases treated by other means. It is seen that the

Table III

HASHIMOTO'S

(12 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	BMR	Duration Illness	Unilateral Bilateral	Recurrence	Hypothyroidism	Psychosomatic	Remarks
2743 '39	35 W	Enlarged T. with pressure	–	–0	6 mos. ?	Diffuse		Not followed	Unknown	P. H. Nurse could not locate
B42970 '44	32 W	Neck swelling; dysphagia	–	Pre. Op. + 18; Post Op. –18	6 mos.	Diffuse	0	0	+	Extremely nervous; seen by psychiatrist
B62576 '45	44 W	Goiter	25 lbs.	+ 8 0 %	11 mos.	Diffuse	?	Gained to 145 lbs.	+	Pulling sensation in throat; voice change slightly
B94336 '46	26 W	Neck swelling	–	Onset –3 + 5	2 yrs.	Diffuse	–	0	–	3/20/47 thinks she is improved but not cured
B72232 '46	47 W	Enlarged T. dysphagia	10 lbs.	–18	231 days	Diffuse	Recurrence 1947	0	+ +	Ret. goiter esp. each attack URI; neck very swollen & sore; ret. syndrome
2636 '46	53 W	Neck swelling	20 lbs.	–5 –4	1 yr.	Unilateral	0	0	+	Rt. lobe sub. resec. Seen by neurosurgeon; neuralgia 2nd cervical nerve; psychosomatic +2
B85395 '46	23 W	Neck swelling	10 lbs.	– 3	1 yr.	Bilateral	?	?		P. H. Nurse could not locate '50; question of death wt. 100 lbs. '42
35556 '36	33 W	Enlarged T.; hoarseness; pressure on neck	Wgt. gain	Nor.	3 yrs.	Bilateral	Recurrence °	0	+	After this 2nd attack well '47
A96211 '42	25 W	Neck swelling; dysphagia	about 10 lbs.	–14 –10	12 yrs.	Diffuse	Recurrence 3/47 °°	0	+	P. H. Nurse could not locate '50
B33499 '44	45 W	Neck swelling; dsyphagia	Wt. loss ?	–6	6 yrs.	Bilateral	0	Hypothyroidism	+	T. ext. under constant medical care
61427 '46	47 W	Enlargement neck	–	–1 –10	2½ yrs.	Diffuse	0	Hypothyroidism 3/47 BMR –30	0	Possible enlarged 11 yrs. before; ? prev. Hash; under med. care since '47
A88415 '42	29 W	Neck swelling; dysphagia	Unknown	–16	4-5 weeks	Diffuse	0	Hypothyroidism '47	+	Stillborn child deformed '48
Average	36.6	Swelling 12 Dysphagia 5	Est. 11 lbs. loss	cases Nor 3 + 2 – 7	3 yrs. 3 mos.	Diff. 8 Unilat. 1 Bilat. 3	3 cases with recurrence	Hypo. 3 Uncertain or Unknown 3 Euthyroid 6	9 cases psychosomatic	

° This patient had Hashimoto's disease with thyroidectomy in 1934. Courtesy of Dr. Clyde L. Bailey, Danville, Virginia.
°° Similar previous episodes—9, 8, and 2 years previously—clinically Hashimoto's. Possibly Hashimoto's at age 13.
All cases treated by subtotal thyroidectomy except one (2636 by unilateral partial lohectomy). Microscopic study by staff of 5 pathologists. All specimens reviewed miscroscopically. Serology on all cases negative. Blood picture, sed. rate and lab. findings except BMR not significant. All females. Public Health Nurse assisted in follow-up.

hospital stay in the irradiated cases is somewhat shorter than that of the patients not so treated, and that fewer patients receiving roentgen therapy had recurrences (26.7 per cent as against 38 per cent). No patient with recurrence after x-ray treatment had more than one postirradiation episode.

The technic used in x-ray treatment of giant cell thyroiditis follows the general principles of radiotherapy for inflammations, and the dosage is small. The plan observed at Duke Hospital has been somewhat flexible but approximates most closely that of Portmann. In his text[36] on radiotherapeutics Portmann suggests four to six exposures of 100-150 r given on alternate days through a single portal just sufficient to cover the thyroid gland. Crile[8] administers a slightly higher average dose totalling 800 r and an initial dosage of 1000 r in refractory cases. Any of these schedules may be repeated safely if required. Our factors are 200 kv, 7x5 cm. field, target skin distance of 30 cm. and a filter having a half-value layer of .9 mm. of copper.

Radiotherapy: Modus Operandi. — Glenn[17] and Kelly[25] have shown the effectiveness of treatment of the inflammations by x-ray in small doses which may explain in part the action of roentgen therapy in subacute thyroiditis. However, the histologic nature of the tissue present is, we think, the real basis for the radiosensitivity

Table IV

RIEDEL'S

(15 Cases)

DUKE HOSPITAL, PERIOD 1930-1949, INCLUSIVE

No. Yr. Adm.	Age Color	Complaint	Wt. Loss	BMR	Duration Illness	Unilateral Bilateral	Hypothyroidism	Psychosomatic	Remarks
C45660 '48	24 W	Neck swelling smothering	9 lbs.	0%	5 yrs.	Unilateral	Not followed		P. H. Nurse unable to locate
C10937 '47	32 W	Neck swelling		Not done	35 days	Unilateral	0	0	3 yr. follow-up to 5/28/50
49809 '35	45 W	Swelling; hoarseness	Wt. Nor.	34%	160 days	Bilateral	+	+	12 yr. follow-up
A98993 '43	54 W	Swelling & tenderness T.		10%	55 days	Bilateral	0	+	7 yr. follow-up
96781 '38	22 W	Neck swelling; chocking sensation	Wt. gain	+ 9	134 days	Bilateral	0	+	6/19/47 seen by neurosurgeon; '47 wrote no return T.
C64624 '49	42 W	Swelling & pain T. reg.		+ 12	56 days	Unilateral	0	0	Hysterectomy Duke 2/23/50
C12315 '47	59 WM	Swelling neck chocking sensation; headache	10-15 lbs.	−11	79 days	Unilateral	0	0	6/8/50 visited by P. H. nurse; wt. same may have gained 5 lbs.
A43798 '46	50 W	Fullness in neck	Wt. gain	19; −13	5 yrs.	Unilateral	0	+	1 yr. follow-up; seen 6/27/47
A97126 '42	54 W	Choking; constriction neck		+ 1	2 yrs.	Unilateral	4/2/43 BMR −48; put on T. ext.	0	Seen 9/16/43; P. H. Nurse unable to locate '50
B56756 '45	60 W	Swelling; choking		Low	99 days	Unilateral	+	+	Follow-up 5/19/47 BMR −18
B31350 '44	52 W	Neck swelling	Wt. gain	−2 −6	9 yrs.	Bilateral	0	0	3 yr. follow-up 3/22/47
B9611 '43	48 W	Swelling; fever	Wt. gain since oper.	6%	37 days	Bilateral	0	+	Seen by psychiatrist 1950
C42281 '48	48 WM	Hoarseness; sore throat; swelling;	Yes	+ 22 + 29 + 44	5 yrs.	Unilateral	0	+	11/9/48 gained 30 lbs; BMR −6
B87540 '46	52 C	choking Neck swelling; fever 38°C		Nor.	5 mos.	Unilateral	0	neg.	4/10/47 free of all symptoms
A98917 '46	53 W	Choking sensation		−1	8 yrs.	Unilateral	T. Ext. BMR −31	+	Treatment for syphilis (latent); high B. P. 7/19/47
Averages	46.8 yrs.	Swelling 13 Choking 6	Loss 3 Gain 4	BMR + 8 BMR − 4	2 yrs. 5 mos.	Uni. 10 Bilat. 5	Hypo T. 4 (26.6%) Eu T. 10 Unknown 1	8 (53.3%)	

Serology on all cases negative, except last case. Blood, sed. rate and lab. findings except BMR not significant. All cases treated surgically and specimens reviewed by staff of 5 pathologists. Two males indicated by "M". Public Health Nurse assisted in follow-up.

of the condition known as giant cell struma; this tissue change is lymphocytic infiltration.

As Williamson and Pearse have it,[44] lymphogenesis is almost certainly a function of the thyroid gland, and there is wide range of round cell and lymphocytic involvement in almost all thyroid disorders representing the singular reaction of the gland to injury, and at one end of the scale there is the picture seen in toxic hyperplasia and at the other end the widespread lymphadenoid state known as Hashimoto's disease.[18]

As is well known, the lymphocyte is the most radiosensitive of all cells and lymphocytic tissue similarly sensitive, so that it is affected by very short exposures to x-ray, varying from infinitesimal amounts up to one-third an erythema dose.[43] To us this is better logic for analysis of the radiocurability of thyroid inflammation than that mentioned by Portmann of virus sensitivity demonstrated by Lea,[35] or that suggested in the work of Sunder and Plessman on thyroid nerve-ending sensitivity, cited by Alvaro.[1] Since we have admitted above to the noninflammatory character of Hashimoto's disease with extreme lymphatic histology, we account for the effect of radiation in this instance, and justifiably, on radiosensitivity alone. Theoretically Hashimoto's disease is a perfect complex for treatment by roentgen rays.

Resistance of Thyroid Parenchyma to X-Ray: Experimental Evidence.—The interest in cellular alteration of the thyroid structure from radiation was stimulated primarily by the use of roentgen therapy in exphthalmic goitre. Zimnitsky[45] states that Williams was the first to irradiate the thyroid gland. Walters et al[41] mention the work of Rave who exposed the thyroid glands of several human beings to x-ray and later exsected them, to find only slight changes. In review, Bower[4] and his associates note the application of radium to the thyroid by Abbe in 1904, Atkins in 1916, and Burrows within the next two years.

Bower and Clark, in 1923, carried out the first reported animal experiments in this country, using dogs because the canine gland most closely resembles the human thyroid. These investigators employed radium needles, using exposures of 2400 milligram hours, and after examination of the histologic structure following thyoidectomy declared that the thyroid was distinctly resistant to the action of radium rays, and postulated that this resistance might be due to ferments or enzymes within the thyroid. The parathyroids were unaffected.

Walters, Anson and Ivy,[41,42] in 1931, using 4560 r or four times the dosage recommended in the treatment of giant cell struma, in their experiments on the dog and opossum, found that the thyroid gland was not materially altered after nine months. They concluded that the larger dosage employed even in hyperthyroidism was safe, with a good margin to spare, and that thickening of the capsule occurred only from overdosage which resulted first in ulceration of the overlying skin. Change in the roentgen exposed glands was in the direction of hyperplasia. Unconvinced, Zimnitsky, Baskina, and Devirz[45] at the Ural Roentgenological Institute in Svordlovsk irradiated the thyroids of rabbits in 1936. Their conclusions were that (1) the parenchyma of the thyroid was resistant to the action of x-rays, (2) hyperplasia did not occur, as believed by Walters,[41] but certain cell elements were lost and, as happens in thyroidectomy, hypertrophy of other cells took place by way of compensation and (3) the structure of the thyroid regenerates when a lapse of time is allowed following radiation.

The St. Louis group, Eckert, Probstein and Galinson,[13] the next year, demonstrated once more on 40 guinea pigs of both sexes that large doses of radiation do not alter the histology or the physiology of the thyroid gland, the immunity of the parenchyma being due probably to the rich blood supply. They concluded that the specific effect of radiation was on the epithelial cells, the reproductive power of the cells being reduced.

In the face of the foregoing, the illusion still persists among experts otherwise well informed that proper irradiation causes fibrosis of the thyroid gland.[29, 39]

Treatment Problem in Hashimoto's Disease.—In medical centers where few thyroid tumors are seen, examiners have difficulty, without biopsy, in distinguishing Hashimoto's struma from Riedel's disease and carcinoma. Hence, the patients with lymphadenoid goitre, as in our 12 cases, routinely undergo surgery which indeed is effective, certainly in the relief of symptoms. The postoperative sequelae of myxedema and of recrudescence, however, have raised the question of whether or not thyroidectomy is the method of choice.

The thyroid gland being accessible, Hashimoto's struma lends itself admirably to roentgen treatment because of the radiosensitivity of the morbid epithelial tissue and the lymphatic invader and because of the resistance of the parenchymal gland to the effects of very large exposures. The elder Crile[9] recommended the use of x-ray in conjunction with surgery for cure of lymphadenoid goitre and prevention of myxe-

dema and recurrence, as had been done earlier by workers in Central Europe. Renton, Charteris and Heggie[38] reported the successful use of a radium collar in treatment of the disorder in 1939, a method which has since been employed in Great Britain, McSwain, Barton and Moore[31] who had hypothyroidism as an aftermath in 14 of their 15 thyroidectomies for struma lymphomatosa came out with a plea in 1943 for radiation therapy in management of this disease. Means[32] published an account of a case *in extremis* following recurrence after thyroidectomy which he controlled with irradiation. George Crile[6] and Portmann[37] have used x-ray in Hashimoto's disease, and recommend it before subjecting the patient to thyroidectomy. Crile regards the Silverman liver puncture method as an excellent way to obtain a thyroid biopsy in lymphadenoid struma. Portmann[37] recommends twice the radiation in Hashimoto's disease as employed in subacute thyroiditis, i. e., about 2000 r given in one or two fields. In brief, roentgen therapy is ideally suited for treatment of the condition, but surgery is also effective and enjoys more popular usage since it offers a means of diagnosis as well as a means of relief. It has its dangers, its complications, and is followed by sequelae already noted, and with the advent of the Silverman biopsy procedure, radiation bids for a more extensive trial in the future.

Treatment in Riedel's Disease.—This is essentially surgical. We are not convinced that such a fibrotic state can be helped by roentgen therapy following surgery, as employed by Fernandez[15] today (and formerly by some of the pioneers) except in those less chronic cases in which fibrosis is not yet complete and some lymphatic invasion obtains. It is generally believed among operators that just enough of the gland should be excised as will alleviate the immediate symptoms.

SUMMARY

1. Sixty-three cases of thyroiditis seen over a twenty-year period at Duke Hospital are presented, including subacute thyroiditis, struma lymphomatosa and struma fibrosa. The incidence is higher in this southern area than that observed elsewhere.

2. Shunned by the surgeon, cases of subacute thyroiditis, naturally subject to recurrence, often are treated in a haphazard way, are protracted into weeks and months of disability. Duration of illness is believed shortened by irradiation, the tenderness and pain are reduced straightway, and the swelling subsides in a matter of two to three weeks. Few cases have recurrence after x-ray therapy, and those actually recurring have shown but a single episode.

3. Twelve cases of Hashimoto's disease and 15 cases of Riedel's struma, all biopsied, reviewed by a large staff of pathologists and classified in the light of clinical findings, are submitted as an addition to the small list of both disorders reported in the literature. Hashimoto's disease, rare among males, is rare also among negroes.

4. Although Riedel's struma should be treated surgically only, both excision and roentgen therapy are used effectively in Hashimoto's disease.

5. Aside from surgical complications, many believe that the postoperative sequelae of hypothyroidism and rescurrence in surgically treated Hashimoto's disease can be obviated by x-ray. The Silverman biopsy method should be used to establish the diagnosis.

6. The old myth of fibrosis resulting from irradiation of the thyroid gland has been disproved by animal experimentation. The effect of x-ray is exerted on the epithelium and lymphatic components of the thyroid, while the parenchyma and physiology remain unaltered. Radiation in sufficient exposure to injure the parenchyma causes, first, ulceration and, next, necrosis of the surrounding skin.

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OBSERVE EATING HABITS

Women in particular are prone to consume too little water. Probably in their case this bad habit stems from adolescence when they found out, or were told, that calls of nature would be less frequent and more easily controlled if they consumed a minimum of this fluid. This habit may persist for a lifetime, and many people, as a result, suffer from chronic dehydration.

It is to be noted that too many people tend to wash their food down with copious drinks of some liquid during mealtimes rather than take the time or make the effort to suitably masticate their food. These people are always in a hurry and don't take the time to eat properly. Many people do not have proper grinding surfaces for the efficient mastication of their food.

It is surprising how often you see someone who is edentulate and possesses only a set of uppers. He will assure you that he can chew perfectly all right, and can even eat corn on the cob, but he is obviously deluding himself or trying to mislead you. Meals should be consumed in a leisurely fashion. I myself am guilty at times of undue haste in this regard and run into a nearby lunch counter for a quick sandwich at noontime. There I see many people who are obviously on ulcer diets, gulping down their lamb sandwich and glass of milk in no time at all and rushing back to work still chewing.

Irregularity of eating is extremely prevalent, especially among people who are under tension. I have been surprised at the number of patients who confess that most of the time they only eat when they are hungry, or that their meal hours vary widely from day to day. These habits should be carefully inquired into, for their effect upon the production or recurrence of an ulcer is obvious. Rest assured the patient will have a good reason for this practice, and it will be hard to change him.

The common practice of a cup of coffee, a piece of dry toast, and a small glass of orange juice for breakfast, a salad or sandwich for lunch, and a tremendous supper is to be deplored. In reference to caloric intake this means that the person in question takes in about 100 calories for breakfast and 120 for lunch. If he is working at all hard he needs 2,000 or more as a total, which means that he has to take in the remainder at supper, which is a great deal; and if he doesn't, he is in a state of chronic undernutrition. If he is a candidate for ulcer it also means that his stomach is empty for practically 20 hours a day.

Beware of the use of superlatives when a patient is describing the amount of food that he or she consumes. People seem to forget sometimes that there are shades or gradations in the use of words. The term "enormous helping" may mean anything from a small dab to a normal serving. Conversely, with the obese "not enough to keep a bird alive" may refer to the eating habits of a vulture.—Wm. Travis Gibb, Jr., M. D., in Medical Annals, District of Columbia.

The President's Page

In 1950, our county society (Mercer) had 61 members, which barely entitled us to four delegates to the annual state meeting. In June of this year we still had our four delegates; however, due to deaths during the year we had but 57 members.

An emergency meeting of the Society was called to ascertain if we could increase our membership, or if not, to decide which delegate to drop from our delegation to the state convention. At the meeting it was brought out that five physicians in the county were not members of the society. They were called and invited to become members, and all promptly accepted.

We pass this information along to the members because we believe that there are several physicians in areas over the state who are not members of a component society, but who would become members if they received a little encouragement.

There are 1400 members of our Association and 1850 licensed physicians in the state. As the county societies provide the only portal of entry into scientific medical organizations, it seems to me that it is our duty to extend invitations to doctors not now identified with a medical society. We need them and they need us. The advantages of membership are too numerous to mention; the need for combined efforts on the part of all of our doctors is too obvious to require discussion.

Don't be like my county society and wait until you get in a tight place before you put on a drive for new members.

Frank J. Salvaggio

President.

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OUR MEDICAL SCHOOL ASSURED

Now that Governor Patteson has decided upon a location for the Medical School, let's all get behind it and work to make it a success. West Virginia needs the school and its graduates in the healing arts and regardless of how much disappointed anyone is as to the location, every citizen, and especially every doctor of medicine, should put his shoulder to the wheel and see that the school is promptly constructed and put into operation. Let's go!

FITTING APPOINTMENTS

Governor Okey L. Patteson has reappointed Dr. Thomas L. Harris of Parkersburg to the board of governors of West Virginia University for another nine year term. Those of us who are familiar with the splendid work that Dr. Harris has done on the board will not be surprised at Governor Patteson's appointment. We congratulate both the Governor and Doctor Harris.

Mention has been made before in these columns (May 1945) that it is fitting that a representative of the West Virginia State Medical Association be chosen to aid in formulating the policy of West Virginia University. There are a number of reasons why at least one physician should be on the board of governors. There is an especially cogent one at present, i. e., the University is about to build a Medical Center. According to the act passed by the Legislature in March, a four year medical school, a dental school and a nursing school are to be built. This is a vast undertaking and an enormous responsibility which in the final analysis rests with the board of governors and the president of the University. Surely the counsel of a physician on the nine-man board will be of inestimable value.

We have just given a practical reason for having a physician on the board. Let us take a broader vision and consider certain intangible reasons. A physician by the very nature of his training and work is particularly well qualified to appreciate and understand human nature. He perhaps more than anyone understands the problems of youth, middle age, and senescence. Indeed, a physician can bring much to the counsel table especially when matters are discussed which concerns the welfare of youth.

The physicians of West Virginia have every reason to feel that Governor Patteson has made a most fortunate choice in reappointing as a member of the board a well-known and highly respected member of our profession.

Incidentally, we cannot recall that a physician has ever been appointed to the state board of education, and certainly there has been none for more than a decade. Every reason which may be presented in favor of the appointment of a doctor of medicine to the governing board of West Virginia University is likewise an argument for the appointment of a member on the State Board of Education. Accordingly, we pass the idea along for consideration in selecting future appointees.

Two other recent appointments represent wise choices on the part of Governor Patteson.

Dr. D. A. MacGregor, of Wheeling, has just been named to membership on the state board of health. Doctor MacGregor is not only an outstanding internist, but one of the leading community builders of the northern panhandle. He is a past president of the State Medical Association, and brings to the state board of health a wealth of experience and judgment.

Dr. George F. Evans, of Clarksburg, has been appointed to succeed himself on the medical licensing board. Doctor Evans was for many years on the staff of Hopemont Sanatorium, but left there to enter private practice in Clarksburg. He gave distinguished service to the Army in the Italian invasion and since his return to civil life has been a member of the council of the West Virginia State Medical Association. He

was one of the first appointees to the medical licensing board and his work on that body has been exemplary.

We congratulate Governor Patteson on his choice for these appointments.

MEDICAL WRITING

The Publication Committee is again issuing a call for scientific papers. It is noted with a great deal of satisfaction that several members of the State Medical Association have submitted papers during the past few months. For the most part, the papers are being printed in the West Virginia Medical Journal.

It should not be a task, but a most interesting undertaking for any doctor who is in the least so inclined to put into words the report of some case which he might have presented orally to small groups or to a medical society or which may never have been discussed outside of his office or the hospital.

The committee will consider with the least possible delay all papers submitted for publication. Such papers should be mailed to the headquarters offices in Charleston.

TRAINING FOR SERVICE

A term or two served as an offiicer of a component society, or as a member of the Council, or chairman of one of the committees, is the best training to prepare for high office in a state medical association. Active participation in the affairs of a component society, followed by service on the Council, enables one to become seasoned and better qualified to serve.

The Council

Dr. Theresa O. Snaith, of Weston, who was just recently elected to the Council from the third district, is a case in point. Doctor Snaith was secretary of the Lewis County Medical Society prior to its merger with the Central West Virginia Medical Society. She was elected secretary of that society in 1949, and is still serving in that capacity. In addition, she has seen active service on the committee on Child Welfare, of which she is now chairman.

Doctor Snaith, as the first woman ever to be elected a member of the Council, has received schooling in organized medicine that will be of invaluable aid to her as a member of that body. She is an executive of no mean ability, and since her election to membership in her local society, has always taken an active interest in the affairs of organized medicine.

She will bring years of valuable experience with her to the Council, and will be a most welcome member of that very active arm of the State Medical Association.

The Presidency

The new president, Dr. Sobisca S. Hall, of Clarksburg, is another example of a member accepting election after years of training. He will be no stranger to organized medicine when he assumes his new duties January 1, 1952.

Besides having served as president and secretary of the Harrison County Medical Society, Doctor Hall has been a member of the Council and chairman of several of the key committees of the State Medical Association. At no time has he declined to serve when called upon. He has willingly and cheerfully accepted each assignment whether of a local, district, state or national character.

Only recently he headed the committee on revision of the constitution and by-laws which has done such an outstanding job in revising the by-laws and preparing amendments to the constitution which wil be voted upon next year.

Doctor Hall will be at home in every sense of the word when he becomes the head of organized medicine in this state.

AMA House of Delegates

Still another example of training for service is found in the case of Dr. Frank J. Holroyd, of Princeton.

Doctor Holroyd is a past president of the Mercer County Medical Society and served as its secretary for eleven years, and during that time also served for four years as a mmber of the Council.

When the call came for an all-out fight against socialized medicine, he accepted the chairmanship of the state public relations committee and led the organized medical forces in this state into second place in the national campaign for the adoption by local and state organizations of resolutions opposing socialized medicine. In addition he served for three years as state and area chairman of the National Conference ("Grass Roots") of County Society Medical Officers, and was a member of the executive board of the conference.

He knows his way around in the councils of the American Medical Association, and when Dr. George F. Evans, of Clarksburg, declined to accept the nomination for another term as AMA delegate, it was most fitting, and certainly fortunate for organized medicine in this state, that he was nominated and electe d to this very im-

portant post. He and the senior delegate, Dr. Walter E. Vest, of Huntington, will compose a team that will continue to provide the doctors of West Virginia the best possible representation in the parent organization's House of Delegates.

We mention these three specific cases to prove two points. First, training for high office in the State Medical Association eventually pays dividends to the entire membership in service performed and to be performed by its officers; and, second, a busy practitioner can find time to serve his confreres when called upon for a particular job.

We happen to know that the three doctors named in this editorial are very busy at all times, and, for all the members of the West Virginia State Medical Association, we extend to them a vote of thanks for past performances, and for their willingness to assume added responsibilities during the coming year.

TARES AMONG THE WHEAT

Take avarice and jealousy and hate from the souls of men, and we would have on this earth a well-nigh perfect social order. A few among the doctors have been heard to ask why they should be expected to train younger men, and thereby enable those younger men to compete with them. Doctors are only human with the usual human faults, and we'll say right here that, personally, we have never been able to find so much as a trace of a halo, no matter how hard we have tried during our morning shave. But when men of medicine apply the theory of scarcity of skills that are needed for the treatment of human ills, they snuff out potentially fruitful professional lives before those professional lives are born.

Let us, in this land of plenty where there is room for all, follow in the footsteps of our medical masters, who gave freely of their knowledge for the alleviation of the sufferings of all men. Let us make room for the promising youngster who seeks only the facilities for his work. Any other way means destruction for our profession and for ourselves. We cannot sow tares among the wheat and expect the wheat to grow.—John H. Schlemer, M. D., in Detroit Medical News.

COMPETITION IN MEDICAL RESEARCH

Medical schools are in competition with each other for attainments in medical research. Those that do best in this field get the best students, who become the mainstay of the institution's reputation. Is this the best system? History will tell us that it probably is not. Is it not possible for a good clinical teacher to be recognized in the same light as another man whose original contributions have brought him to eminence? It seems at present that it is not possible. Both money for instruction and status for the instructor are needed in this complex society of medical-school teaching if we are not to confuse fundamental issues. —New England Journal of Medicine.

GENERAL NEWS

DR. SOBISCA S. HALL, OF CLARKSBURG, NAMED PRESIDENT AT ANNUAL MEETING

Dr. Sobisca S. Hall, of Clarksburg, was elected president of the West Virginia State Medical Association at the 84th annual meeting at the Greenbrier in White Sulphur Springs July 19-21, 1951. His election came at the second session of the House of Delegates on July 20. He will assume his new duties January 1, 1952, succeeding Dr. Frank J. Holroyd, of Princeton, who will at that time become chairman of the council. Dr. Charles E. Watkins, of Oak Hill, the present chairman, will serve next year as councillor at large.

Dr. Clark K. Sleeth, of the School of Medicine at West Virginia University, was elected first vice president to succeed Dr. A. R. Sidell, of Williamstown, and Dr. J. C. Huffman, of Buckhannon, was reelected for his fourth consecutive term as second vice president.

Dr. T. Maxfield Barber, of Charleston, who has served continuously as treasurer of the Association for the past 24 years, was reelected for his 25th term.

Sobisca S. Hall, M. D.

Doctor Hall was born at Horner, in Lewis County, June 18, 1899. He received his early education in Lewis County schools and upon his graduation at Weston High School, enrolled at West Virginia University, where he received his B. S. degree in 1923; M. D., Rush Medical College of the University of Chicago, 1926; interned at the U. S. Naval Hospital, New York City, 1925-1926, and was licensed to practice in West Virginia in 1926. He had postgraduate work in

otolaryngology at New York Eye and Ear Hospital and the University of Pennsylvania Hospital. After practicing at Buckhannon for a short time, he was located at Fairmont for a few years before moving to Clarksburg, where he is associated in practice with Dr. Harry V. Thomas. Doctor Hall's specialty is otolaryngology.

He married the former Martha Thompson, of Monroe County. They have three daughters and a son.

Doctor Hall is a diplomate of the American Board of Otolaryngology, a fellow of the American Academy of Opththalmology and Otolaryngology, a fellow of the American Broncho-Esophagological Association, a member of the American College of Surgeons, the American Academy of Otolaryngology, and the American Bronschoscopic Society.

During World War II, he served with the Medical Corps of the Army, and was released with the rank of Lieutenant Colonel, AUS.

He has always been interested in the affairs of organized medicine. He has served as a member of the Council of the State Medical Association, and as president of the Harrison County Medical Society.

Councillors

Dr. J. P. McMullen, of Wellsburg, a member of the council from the first district, was reelected for a two-year term.

Five members of the council were not eligible for reelection due to the fact that they will each have completed four years' service December 31, 1951.

New members of the Council were elected as follows: Second district, Dr. Maynard P. Pride, Morgantown, to succeed Dr. Fred R. Whittlesey, also of that city; third, Dr. Theresa O. Snaith, Weston, to succeed Dr. E. H. Hunter, Webster Springs; fourth Dr. C. A. Hoffman, Huntington, to succeed Dr. James S. Klumpp, of that city; fifth, Dr. A. J. Villani, Welch, to succeed Dr. J. C. Lawson, of Williamson; and, sixth, Dr. Raymond A. Updike, Montgomery, to succeed Dr. D. C. Ashton, of Beckley.

Hold-over members of the Council who will serve during 1952 are as follows: Drs. Hu C. Myers, Philippi; George F. Evans, Clarksburg; Athey R. Lutz, Parkersburg; E. L. Gage, Bluefield; and Russel Kessel, Charleston.

AMA Delegate and Alternate

Dr. Frank J. Holyroyd, of Princeton, was elected delegate to the American Medical Association to succeed Dr. George F. Evans, of Clarksburg, who declined the nomination. Doctor Evans, who is a member of the Council, has served one term as AMA delegate. Doctor Holroyd, who will complete his term as president of the State Medical Association January 1, 1952, will automatically become chairman of the Council at that time.

Dr. James L. Wade, of Parkersburg, who has served several terms as AMA alternate, was unanimously reelected to that office.

Registration Soars

Nearly 400 doctors were registered at the 84th annual meeting at White Sulphur Springs. The exact total was 392. This compares with a doctor registration of 313 in 1950 and 320 in 1949. The all-time record for doctor attendance at an annual meeting was set at the 1947 convention in Charleston. The total doctor registration at that meeting was 551.

Only twice previously, in 1946 and 1948, has the registration exceeded the 400-mark.

RELOCATIONS

Dr. David B. Gray, formerly of Rainelle, has completed a three-year residency at the University Hospital in Baltimore and has located in Charleston for the practice of his specialty. He has offices at 212 Morris Street.

* * * *

Dr. James A. Farley, who was formerly located at Delbarton, has completed a three year residency in internal medicine at the U. S. Veterans Hospital, New Orleans, and has located for the practice of his specialty in Fort Worth, Texas. He has offices there in the Professional Building, 1216 Pennsylvania Avenue.

* * * *

Dr. Haven M. Perkins, of Charleston, has opened offices at 1211 Quarrier Street, in that city, where he will practice his specialty of thoracic surgery and diognostic endoscopy.

* * * *

Dr. Edwin P. Stabins has completed a three year course in pediatrics at Cornell University Medical College and has located in Charleston for the practice of his specialty. He is associated with Dr. Jack Basman, with offices in the Atlas Building.

Doctor Stabins is a graduate of Cornell and had postgraduate work at the University of Utah School of Medicine. He previously served a residency in medicine at Charleston General Hospital and in the U. S. Navy.

* * * *

Dr. Donald R. Gilbert, of Rutherfordton, North Carolina, has completed a three year residency in urology with Dr. Ross Dodson, at the Medical College of Virginia, and has located for the practice of his specialty at 1120 Quarrier Street, Charleston. He is associated with Dr. Henry M. Escue.

* * * *

Dr. Dwight P. Cruikshank, III, formerly of Lumberport, has completed a residency at St. Joseph's Hospital, in Parkersburg, and has located for practice in that city. He is associated with Dr. Charles L. Goodhand with offices at 1130 Market Street.

DOCTOR MacGREGOR NAMED TO HEALTH BOARD

Dr. Delivan A. MacGregor, of Wheeling, has been appointed by Governor Okey L. Patteson as a member of the State Board of Health for the unexpired term of Dr. Robert J. Reed, also of Wheeling, who tendered his resignation late in June. Doctor MacGregor's term will expire June 30, 1956.

CONSTITUTIONAL AMENDMENTS TO BE VOTED UPON AT 1952 MEETING

The following amendments to the constitution of the West Virginia State Medical Association, offered by the committee on revision of constitution and by-laws at the annual meeting of the House of Delegates at White Sulphur Springs, July 19-21, 1951, will be submitted to the House for final action at the 85th annual meeting at White Sulphur Springs July 24-26, 1952:

Article II

Sec. 1, line 6: Insert after the word "science," the words "to promote the public health;"

Sec. 1, lines 8-11: Delete the words "to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition;", and insert in lieu thereof the words "to promote the general welfare of physicians;"

Sec. 1, line 16: Delete the words "prolonging and adding comfort to life.", and insert in lieu thereof "prolonging life and adding comfort thereto."

Article V

Sec. 1, line 4: Delete the words "and (3) ex-officio, the President.", and insert in lieu thereof the words "and (3) the President, the two Vice Presidents, and the Treasurer."

Article VI

Sec. 1, line 5: Delete the words "Five Councillors shall constitute a quorum", and insert in lieu thereof the words, "A majority of the membership of the Council shall constitute a quorum."

Article VII

Sec. 1, line 6: Delete the word "county" so that the clause will read "such societies to be composed exclusively of members of component societies."

Article IX

Sec. 1, line 2: Delete the word "and," after the words "two Vice-Presidents."

Sec. 5: Delete the entire section. (See Art. V, Sec. 1, with proposed amendment.)

Sec. 6: Delete the entire section.

Article XI

Sec. 1, paragraph 2, lines 7-9: Delete the entire sentence beginning "All resolutions", and insert in lieu thereof the following: "If there be objection to the adoption of any resolution appropriating funds, it must be referred to the Council before action is taken thereon."

Article XII

Sec. 1: Delete the words "and, if" in line 6, and all of lines 7, 8, 9, and 10, and add in lieu thereof the following: "and if those voting shall comprise a majority of the members of the Association, then the action of the majority of those so voting shall determine the question and be binding upon the House of Delegates."

DR. THERESA O. SNAITH FIRST WOMAN EVER TO BE ELECTED TO THE COUNCIL

Dr. Theresa O. Snaith, of Weston, who was elected a member of the Council at the annual meeting at White Sulphur Springs, will be the first woman ever to hold membership in that body. She will take office January 1, 1952. Her term is for two years.

Doctor Snaith, who is now secretary of the Central West Virginia Medical Society, was also the first woman ever to hold that office in her society. She served as secretary in 1934-35, and was elected again in 1949.

Theresa O. Snaith, M. D.

Doctor Snaith also enjoys the distinction of being the first woman ever to receive the degree of M. D. from the University of Maryland School of Medicine. She graduated in 1923 and interned at University Hospital in Baltimore, 1923-24. She served a residency there in 1924-25.

She had her postgraduate work at Childrens Clinic, University of Maryland Hospital, and at hospitals in Baltimore, Washington, and St. Louis. She is a diplomate of the American Board of Pediatrics.

She was licensed in 1931, and located at Weston for the practice of her specialty of pediatrics. She has practiced there continuously since that time.

DR. VEST RENAMED CHAIRMAN OF MLB

Dr. Walter E. Vest, of Huntington, was reelected chairman of the Medical Licensing Board for a two year term at a meeting held in Charleston on July 10. He was the first chairman of the board, which was organized July 1, 1949. He had previously served for twelve years as president of the old public health council. He was president at the time the medical licensing board replaced the council as the licensing body for physicians, chiropodists and chiropractors.

LARGE AUDIENCES HEAR DRS. CLINE AND HOLROYD AT NIGHT MEETINGS

The two open sessions held in connection with the 84th annual meeting of the State Medical Association at White Sulphur Springs July 19-21 drew exceptionally large audiences. The attendance record for a night meeting was broken on Thursday, July 19, when Dr. Frank J. Holroyd presented his presidential address.

QUOTES FROM DR. HOLROYD'S ADDRESS

Doctors, above all persons, because of the nature of their work, know the difference between symptoms and causes. We must apply this knowledge to the curing of diseased public relations. Our proposed public service program recognizes this. When the causes are removed, the symptoms showing up in the political pus of socialized medicine will disappear.

For the next two years and possibly longer (?), we will have on our hands Oscar Ewing and President Truman who will undoubtedly leave no stone unturned to force upon the country a federal system of compulsory health insurance. It makes no difference to them if they get in through the front door, the back door, the side door, or the basement.

The AMA is the only organization which can properly present the opinions and protect the interests of the physicians of America.

There is no group in existence with as great a potential for excellent public relations as the local group in our profession. Patients, friends, and acquaintances all look to their doctors not only for health care but also for family guidance. They call on him not only to set a broken arm but also to sympathize with a broken heart.

We must never forget that medicine must be practiced with a heart as well as a head.

A patient wouldn't expect to get his car fixed in his own garage, but he expects a doctor to function as well in a home as in his office or a hospital. We will meet the patient far more than half way, but let's always keep in mind that there are two sides to the problem. Cooperation is an excellent word but it takes two or more people to make it mean anything.

The audience on Friday night, when Dr. John W. Cline, of San Francisco, president of the American Medical Association, was the guest speaker, was almost equally as large. In his address, Doctor Cline stated that, in order to maintain the standards of medical care in the United States and progressively improve them, it is essential that American medicine remain a free enterprise.

Medicine Must Remain Free

Touching on the fight that has been waged against compulsory health insurance, he said that "history teaches us that wherever socialized medicine is brought into being, medical care deteriorates, and the medical profession, no longer free, no longer possesses the incentive to work continuously toward improvement of medical care."

The speaker said that more than 100,000 organizations, national, state and local, and more than 90 per cent of the newspapers and a large segment of labor unions are opposed to socialized medicine.

Speaking of the work that is being done by voluntary insurance plans, he stated that not only must the numerical growth of this type of work be continued, but such program must be improved in quality and scope. He insisted that it is important that the people themselves be given the opportunity to choose between the various types of coverage. "Competition and the different designs of plans," he said, "will ultimately provide the best coverage to suit the needs of the people."

He urged doctors to uphold the high standards of ethics in the profession, to participate in public activities and to improve press relations. Praising the work that has been done by the newspapers of America, he said the "publishers, editors, and reporters are honest men who desire to paint accurate word pictures for their readers."

Surprise Guest Speaker

A surprise guest speaker at the evening meeting on July 21 was Mrs. E. Wyatt Payne, of Huntington, who delivered a broadside against communism. She had the audience with her all the way, and was compelled to hold "open house" for a half-hour after the close of the meeting in order to answer the questions propounded concerning the spread of communism in this country. She was the guest speaker at the Auxiliary luncheon at noon that same day.

Due to the number of guests (over 800) at The Greenbrier for dinner Friday, July 20, the meeting did not get under way until nearly ten o'clock, but the auditorium was practically filled when Doctor Cline was introduced by Doctor Holroyd.

Auxiliary Officers Speak

Mrs. Ross P. Daniel, who has just completed her term as president of the Woman's Auxiliary to the State Medical Association, then delivered one of the best addresses ever heard at an open meeting of the Association. She reviewed briefly the work in which the Auxiliary had engaged the past year, and expressed the thanks of the members for the close cooperation that has existed between the two groups.

Mrs. Harold F. Wahlquist, who followed Mrs. Daniel on the program, spoke most interestingly concerning the work of the Auxiliary over the country, but specifically singled out the West Virginia group for the very fine work that has been done in the campaign against compulsory health insurance.

Mrs. L. S. Thompson, of Dallas, Texas, president of the Southern Medical Auxiliary, and Mrs. V. Eugene Holcombe, of Charleston, president elect, appeared on the program with Doctor Holroyd, Mrs. Daniel, and Mrs. Wahlquist. They brought cordial greetings from the Southern Medical Auxiliary and extended an invitation to the members of the West Virginia Auxiliary to accompany their husbands to the annual meeting at Dallas, Texas, in November.

COLLEGE OF PHYSICIANS
OF PHILADELPHIA

GOVERNOR HONOR GUEST AND BILL CUNNINGHAM SPEAKER AT BANQUET

Bill Cunningham proved to be one of the most interesting guest speakers ever to appear before an annual banquet of the West Virginia State Medical Association. From the beginning of his address at the banquet at the Greenbrier on Saturday evening, July 21, until he had finished he literally held the large audience spellbound with his discussion of topics of the day.

The speaker went far beyond his announced subject, "How It Looks From Here," by proving to the satisfaction of his audience that conditions in this country and over the world are not quite as dark as painted. "What's Right With America" was his theme, and it was the consensus after his address that America is really prepared for any eventuality, or will be at an early date.

The attendance at the banquet was about four hundred, with extra tables having to be set up in the foyer of the Colonnades Dining Room, where the banquet was held.

Governor Patteson Honor Guest

Governor Okey L. Patteson was an honor guest and spoke briefly concerning his decision to locate the four-year school of medicine at Morgantown. He was accompanied by Mrs. Patteson, who was also introduced. Among other prominent guests present were Senate President and Mrs. W. Broughton Johnston, of Princeton, and House Speaker and Mrs. W. E. Flannery, of Logan.

Doctor Watkins Toostmaster

Dr. Charles E. Watkins, of Oak Hill, immediate past president and chairman of the Council, was the toastmaster, and he did as good a job as could possibly have been done by the late Will Rogers.

Mrs. Ray S. Greco, of Weirton, whose husband practices in that city, won the door prize, which was a beautiful portable radio.

Favors were distributed through the courtesy of the Schering Corporation, R. J. Reynolds Tobacco Company, Beech Nut Packing Company, Philip Morris, Limited, and Physicians Record Company.

Iro E. "Rot" Rogers Eulogized

Bill Cunningham devoted several minutes of his address eulogizing Ira E. "Rat" Rogers, one of West Virginia's "gridiron greats," who played fullback on the teams of 1915 and 1916 when West Virginia was on the Dartmouth schedule.

In the main part of his address, he stated that the United States has lost the first war in which her fighting men have been engaged "and is losing her world leadership as the last citadel of freedom, dignity and justice in the loss of her traditional morality."

The speaker said that he was not speaking of personal morals, which "are within the province of the clergy," but referred to the honor, the courage, the manhood of the once fearless and forthright Uncle Sam, which is being "rotted and weakened by appeasement and compromised by ideologies of defeatism and worse."

He said that the lack of morality in our entire national setup was the greatest shock General MacArthur received after an absence of 15 years. He was prepared to find great changes and was, for instance, baffled by television. However, he quoted him as having said that American morality has not kept pace with the advancement in other fields.

Speoker Optimistic

The speaker sounded a word of optimism. In fact, his whole message breathed optimism, principally because he believes that we are on the way to becoming the greatest force for peace in the whole world. He closed his address with the statement that we are still a great nation. "We still have our tremendous resources," he said, "our new military might that's now tremendously formidable. We have moral right on our side. In fact, we have everything but the true sense of decency, shining honor and unfaltering responsibility without which there can be no real leadership either here or in the councils of the world.

"Regardless of party or politics, we must find high principled, incorruptible men, move them into the places of responsibility and then back them to the utmost. Then the character—the morality—of the nation will be restored, and order will begin to emerge from all this unbelievable chaos."

MEDICAL TENNIS TOURNAMENT

Dr. Spencer L. Bivens, of Charleston, was the winner of the singles championship at the tennis tournament held in connection with the 84th annual meeting of the State Medical Association, at the Greenbrier at White Sulphur Springs, July 19-21.

Doctor Bivens now has one "leg" on the championship trophy offered by Kloman Instrument Company, Inc., of Charleston. The finals of the singles championship could not be played in 1950, as there was not sufficient time left for the event the final afternoon. Doctor Bivens and Dr. Robert M. Biddle, of Parkersburg, will play for the 1950 singles championship at some place to be agreed upon later on this year.

Doctor Bivens and Dr. Pat A. Tuckwiller, of Charleston, were the winners of the doubles championship. They won this same event in 1950.

OVER 1700 PHYSICIANS REGISTERED

As of July 1, 1951, 1739 physicians had re-registered with the state department of health for the biennium ending June 30, 1953. Of this total, 135 are located outside of West Virginia.

Under a new ruling of the Medical Licensing Board, physicians who have retired are exempt from paying the $2.00 registration fee if the application is returned marked to show such retirement. Up to July 1, 54 physicians who have retired had filed applications for re-registration.

The re-registration law provides that the license of any doctor eligible for re-registration who has not complied with the law shall automatically expire on June 30 of the re-registration year.

COUNCIL IN LONG PRE-CONVENTION SESSION AT WHITE SULPHUR SPRINGS

The pre-convention meeting of the Council, held at the Greenbrier Wednesday, July 18, 1951, was attended by all of the members with the exception of Dr. James S. Klumpp, of Huntington, who could not be present on account of personal illness. The session lasted for seven hours, less time out for dinner.

The Executive Secretary was directed to send a wire to Doctor Klumpp, expressing the hope of the members of the Council that he would soon be restored to good health.

Honorary Members Elected

The following doctors were elected to honorary lifetime membership in the State Medical Association:

B. F. Moyers, Mathias
J. A. Rusmisell, Buckhannon
J. U. Rohr, Old Sweet Springs
C. I. Wall, Rainelle

AMA Associate Fellowship

Dr. S. D. H. Wise, of Parkersburg, was unanimously nominated for associate fellowship in the American Medical Association.

VA Contract Renewed

The Council ratified the action of its members in directing, by a poll taken by mail May 16, 1951, the renewal of the contract with the Veterans Administration for home-town care of veterans. The contract expired June 30, 1951, and was renewed for one year.

Revision of VA Fee Schedule

Dr. Henry M. Escue, a member of the VA Board of Review, reported that his group, with the aid of an advisory committee drawn from the various specialities, had completed an overall revision of the VA fee schedule, and the proposed revision, as presented by the board, was unanimously approved. The executive secretary was directed to report the matter to the Veterans Administration at Washington and request concurrence in the changes approved.

Section on Radiology

The creation of a new Section on Radiology, requested by radiologists practicing in West Virginia, was approved and the chairman directed to report such approval to the House of Delegates.

Section Name Changed

The Council also approved the expansion of the present Section on Industrial Health to include public health, and also approved a change in the name of the section to "Section on Industrial Medicine and Public Health." The chairman was directed to report to the House of Delegates the Council's approval of this change.

Organization of SAMA Approved

The request of Dr. B. M. Drake, deputy director of health, for approval of a film badge monitoring service for hospitals in West Virginia was approved, together with the suggestion of Dr. Clark K. Sleeth, of the School of Medicine at West Virginia University, for approval of the establishment at that school of a Chapter of the Student American Medical Association.

Junior Academy Award

The executive secretary reported that Mr. Richard Farrish, of Marshall High School, Huntington, had won the award offered by the Council for the best paper submitted on a medical subject by a member of the Junior Academy of Science for the school year 1950-51. The Council again voted an award for the best paper on a medical subject to be submitted during the school year 1951-52.

The request of the State Nurses' Association for approval of the "Report of the Committee on Duties, Responsibilities and Qualifications of the Nurse in Industry" was referred to the Nurses' Liaison Committee for study and report back to the Council.

Medical Examiner's System

Dr. Thomas G. Reed, chairman of the fact finding and legislative committee, reported that it is the intention of his committee to continue its study of the feasibility of the establishment of a medical examiner's system in West Virginia with the idea of having a bill prepared in time for introduction in the 1953 legislature. The establishment of such a system in West Virginia was unanimously approved and the chairman directed to report the matter to the House of Delegates and request concurrence in such approval.

Permanent Home

Dr. Paul P. Warden, of Grafton, chairman of the committee on permanent home, reported that his committee was of the opinion that the State Medical Association should continue to maintain headquarters at the present location in the business district of Charleston "which is accessible to members located outside that city who desire to visit such headquarters." Doctor Warden reported further that his committee was of the opinion that, while the idea for a permanent home should not be forgotten, action should be postponed at the present time on account of the scarcity of materiel and the prohibitive price of real estate.

The committee's recommendation that the U. S. Treasury bonds in the amount of $22,000, now owned and registered in the name of the West Virginia State Medical Association, be earmarked for future use in providing a permanent home was unanimously approved. The further recommendation of the committee that the annual interest on the bonds amounting to $440.00 be used for the purchase of another bond each year in the amount of $500.00 was also unanimously approved, the Council directing that a sufficient sum be added to the receipts from that source to cover the purchase of a five-hundred dollar bond.

The executive secretary was directed to notify the secretary of each component society of the action taken by the Council and request that a special fund be set up in each such society for the purpose of aiding in

the construction of a permanent home, such fund or funds to be raised by contribution or assessment. The component society secretaries are also to be requested to inform their members that bequests on the part of doctors would be an acceptable method of increasing the funds held by such component societies for this purpose.

Changes in Constitution and By-Laws

The recommendations of the Committee on Revision of Constitution and By-Laws, submitted by the chairman, Dr. Sobisca S. Hall, of Clarksburg, were approved in their entirety as printed in the May, 1951, issue of the West Virginia Medical Journal.

Compensation Fee Schedule

Acting at the request of the West Virginia Academy of Ophthalmology and Otolaryngology and Kanawha Medical Society, the Council directed the chairman to appoint a committee, to be composed of representatives of the various groups in the Association, for the purpose of conferring with the state compensation commissioner concerning a revision of the fee schedule now in effect.

The committee is to be requested to report back to the Council at the earliest practicable date.

AMA Fellowship

The following resolution, offered by Doctor Huffman, was unanimously adopted:

"WHEREAS, much confusion exists among the members of the medical profession as to 'Fellowship' in the American Medical Association; and,

"WHEREAS, considerable dissatisfaction exists throughout the profession as to Fellowship:

"THEREFORE, BE IT RESOLVED, by the Council of the West Virginia State Medical Association, That our delegates to the American Medical Association be instructed to present this resolution to the House of Delegates at the clinical session in Los Angeles, in December, 1951, and to vote in favor of abolishing Fellowship in the American Medical Association."

Appointment of PR Director Disapproved

A resolution presented by the Fayette County Medical Society recommending the appointment of a full-time public relations director for the State Medical Association was considered along with the suggestion of the co-chairmen of the Public Relations Committee, for the employment of a full-time director of health education and public relations. After discussion by several members of the Council, the matter was ordered laid on the table.

W. VA. CHAPTER ACS ELECTS OFFICERS

Dr. Hugh A. Bailey, of Charleston, was elected chairman of the West Virginia Chapter of the American College of Surgeons at the annual business meeting held at White Sulphur Springs, July 19, 1951. Dr. W. W. Scott, of Williamson, was named secretary, and councillors were elected as follows: Drs. Henry M. Hills, Jr., Charleston; Frank V. Langfitt, Clarksburg; and John O. Rankin, Wheeling.

Dr. William R. Laird, of Montgomery, is West Virginia Governor of the American College of Surgeons.

DR. R. R. SUMMERS WINS MEDICAL GOLF TROPHY AT THE GREENBRIER

Dr. R. R. Summers, of Charleston, was the winner of the championship golf trophy, offered by Kloman Instrument Company, Inc., of Charleston, at the medical golf tournament held in connection with the annual meeting at White Sulphur Springs July 19-21. Dr. Charles E. Watkins, of Oak Hill, was the winner in 1950. Each of these doctors now has a "leg" on the trophy.

The trophy previously offered by Kloman several years ago was retired in 1950 by Doctor Watkins, who had won three medical tournaments.

A total of 110 doctors participated in the 1951 tournament, with play being limited to afternoons during the three-day meeting. This set another new record for the number of participants in the golf tournaments sponsored by the State Medical Association. Last year eighty doctors played in the tournament at The Greenbrier.

Other awards were made as follows: Low net (69) Dr. J. P. McMullen, of Wellsburg; low putts, Dr. A. A. Yurko, of Cove Station, Weirton; most fives, Dr. Francis J. Gaydosh, of Wheeling; blind bogey, Dr. John H. Trotter, of Morgantown; and, most sixes, Dr. R. T. Humphries, of Clarksburg.

Dr. R. R. Summers was chairman of the committee which had charge of the tournament and the other members were Drs. James S. Klumpp, of Huntington, and J. I. Markell, of Princeton.

PROGRAM COMMITTEE FOR '52

Dr. Sobisca S. Hall's first official act as president elect of the State Medical Association was to name the program committee which will arrange the scientific program for 1952. The committee is as follows: Dr. George F. Evans, Clarksburg, chairman; and Drs. J. P. McMullen, Wellsburg, and E. Lyle Gage, Bluefield.

The first meeting of the committee will be held late this summer, at which time the type of program to be arranged will be given consideration.

DOCTOR HOLROYD RECEIVES EMBLEM

Dr. Frank J. Holroyd, president of the State Medical Association, was presented with the president's emblem immediately following his presidential address at an open meeting Thursday evening, July 19, held in connection with the annual meeting at White Sulphur Springs. The presentation was made by Dr. Charles E. Watkins, chairman of the Council. The charm is presented to the president at each annual session in recognition of his services to the profession in this state.

MLB TO MEET OCT. 1-3, 1951

The fall meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, October 1-3, 1951, for the purpose of examining applicants for licensure to practice in West Virginia.

OVERALL REVISION OF BY-LAWS APPROVED BY HOUSE OF DELEGATES

The first and second sessions of the 1951 House of Delegates were held Thursday and Friday, July 19-20, at the Greenbrier, White Sulphur Springs. A total of 75 delegates were present at the first meeting, and this number had risen to 86 on the second day.

Delegates were present from all of the component societies with the exception of four. The Friday session was one of the most largely attended in recent years. The reports presented by standing and special committees will appear in the September issue of the West Virginia Medical Journal.

Council Recommendotions Accepted

Dr. Charles E. Watkins, of Oak Hill, chairman of the Council, submitted the report for that body. Recommendations that a new section on radiology be created and that the name of the present section on industrial health be changed to the "Section on Industrial Medicine and Public Health" were unanimously agreed to.

The House also approved the recommendation of the council for the establishment of a medical examiner's system in this state, and the fact finding and legislative committee was authorized to continue its study of the matter so that a bill may be prepared for introduction in the 1953 session of the legislature.

Upon the recommendation of the council, the House unanimously instructed the AMA delegates from West Virginia to vote in favor of abolishing the classification of "fellowship" in the American Medical Association, which matter will be on the agenda for consideration at the AMA clinical session at Los Angeles in December, 1951.

The House, at its first session, unanimously directed the executive secretary to wire Dr. James S. Klumpp, a member of the Council, its sympathy in his present illness, with best wishes for early recovery.

By-Lows Amended

At the second session on Friday, July 20, that body went on record unanimously as approving all of the amendments to the by-laws offered by the committee on revision of constitution and by-laws, headed by Dr. Sobisca S. Hall, of Clarksburg. The amendments, which were printed in the May issue of the Journal, are effective immediately insofar as they do not conflict with the proposed amendments to the constitution. The following are among the principal amendments adopted:

Payment of state dues and current assessments, and license to practice medicine in West Virginia, are now prerequisite to membership in the State Medical Association;

The minimum age for election to honorary membership was raised from sixty-five to seventy years, with a provision that the doctor must have been a member for fifteen consecutive years prior to his seventieth birthday;

The name of the scientific work committee, which has been used probably for the past fifty years, was changed to "program committee";

Each component society will now be allowed one additional delegate and alternate for every 25 members, or fraction thereof, in addition to the secretary of the society. Heretofore each society has been entitled to one delegate and one alternate for every 25 members or fraction thereof above ten members.

The provision for the appointment of chairmen of the committees on child welfare and maternal welfare was eliminated. Hereafter, each committee will select its own chairman; and,

All resolutions hereafter offered at the first session of the House of Delegates will lie on the table for one day.

The proposed constitutional amendments, which appear elsewhere in this issue of the Journal, will be submitted to the House for final action at the 85th annual meeting in 1952.

1952 MEETING AT WHITE SULPHUR

The 85th annual meeting of the West Virginia State Medical Association will be held at White Sulphur Springs, July 24-26, 1952. This will make the fourth consecutive year that the meeting has been held at The Greenbrier.

Amendments to Constitution

Two amendments to the Constitution offered at the annual meeting in 1950 were unanimously adopted. One limits membership to "doctors of medicine licensed to practice in West Virginia who are members of a component society of the West Virginia State Medical Association," and the other raises annual dues from $15.00 to $25.00.

Council to Study PR

The House rejected a resolution which would have directed the Council to take immediate steps looking toward the appointment of a full-time public relations director. Subsequently, the House directed the Council to set up a special committee to study the matter of public relations, including costs of such a new department, duties of the director, etc., so that the entire matter may be considered at a future date.

Advance Copies of Annual Reports

The House approved the suggestion of Dr. J. N. Jarrett, a delegate from Fayette County, that annual reports of standing and special committees be prepared and submitted to the executive secretary in sufficient time prior to an annual meeting for them to be mimeographed and transmitted for study by delegates and component societies before being formally presented.

85th Annuol Meeting ot the Greenbrier

The House voted unanimously to return to the Greenbrier in White Sulphur Springs for the annual meeting in 1952. The dates are to be fixed by the Council.

BOARD OF GOVERNORS ACCEPTS SITE FOR 4-YEAR SCHOOL IN MORGANTOWN

An 80-acre tract of land located adjacent to the Monongalia County General Hospital, near Morgantown, has been selected by the board of governors of West Virginia University as the site of the new four-year school of medicine, dentistry and nursing. The tract, donated by the Monongalia County Court, was formally accepted by the board at a special meeting July 12, in Morgantown.

The board directed that surveys of the site be made immediately, and set August 2 as the date of another special meeting to consider the matter of the employment of architects to plan the site of the units to be built at the new location. It was indicated after the meeting that the first unit to be constructed would probably be a class-room building to cost approximately $2,000,000.

The Monongalia County Court also offered to convey to the board of governors without consideration the Monongalia County General Hospital and nursing home, but action on the acceptance of the offer was reserved by the board for consideration at a future meeting.

Governor Selects Morgantown

Governor Okey L. Patteson, charged by the legislature with the responsibility for the selection of a site for the new school, announced on Saturday evening. June 31, that, after due consideration and careful study, he had decided upon Morgantown as the site for the new institution. The announcement was made just a few hours before the deadline set by the legislature for the selection of the site.

In naming Morgantown as the location of the new school, the Governor issued a 33-page statement, setting forth his reasons for the selection of Morgantown as the site, instead of placing the school at Huntington or Charleston. He cited the following eighteen specific points in support of his selection.

"1. (It) Provides administrative clearance and daily collaboration between the Dean of the Medical School and the President of the University;

"2. Provides direct supervision and direct control over all parts of the School by the University;

"3. Unites the basic sciences and clinical practice, resulting in mutual advantages of both research and instruction:

"4. Maintains all the schools and colleges of the University at one site;

"5. Prevents duplication of many buildings and facilities needed for a four-year medical school, which are already in existence at the University;

"6. Provides the medical students with an educational, cultural and recreational background together with a well-rounded student life on the campus of the University;

"7. Permits students to avail themselves of the facilities offered by dormitories, and other provisions in the University town for helping student life;

"8. Provides economy through utilization of administrative organizations, teaching and research staff, libraries and other facilities;

"9. Actual experience proves that when medical schools are divorced from the University campus, rivalry develops, and often politics enters the Medical School. Most certainly, politics should never be allowed in any manner to affect such a vital institution as a school of medicine.

"10. Regardless of where the school is located, it is necessary to build its own teaching hospital to supplement existing facilities. This, in itself, makes less impressive the statement that a state metropolis can offer more in the way of hospital facilities. A medical school must have a teaching hospital, even though there are 10 or 12 hospitals in the immediate vicinity offering their facilities.

"11. It has been proved to me that if a Medical School has a good staff, the clinical material needed for instruction will come to it. The hospitals in small university towns advise that their problem is not obtaining enough clinical material, but rather to take care of the abundance of clinical material offered.

"12. A well-developed and firmly established nucleus is already located on the campus of the State University in our present two-year medical school, which has such an outstanding record.

"13. There is already a close connection between the present two-year School of Medicine and the other Schools on the University campus, including the School of Pharmacy, and research laboratories.

"14. A number of needed faculty members are already on the University rolls, and a smooth transition from the second to the third year can be more easily attained in that town.

"15. The taxpayers will be saved large sums of money by utilizing already existing facilities at Morgantown. To duplicate these on a new campus would be an unjustifiable waste of money.

"16. I am convinced that Morgantown and vicinity will provide the necessary clinical patients, and that the close proximity of Hopemont Sanitarium, Weston State Hospital, and the Veterans Administration Hospital at Clarksburg, will be invaluable. As stated from the experience of other schools, I believe that our problem will also be that of taking care of the patients, instead of the problem of an insufficient number of patients.

"17. Experience indicates that factors other than the size of the cities determine the relative cost of medical education. In fact, if the size of the city has any discernible influence on cost, the evidence would seem to indicate, the larger the city the larger the cost.

"18. The University already has land available in Morgantown for the School, and the County Court of Monongalia County has offered the Monongalia General Hospital and Associated Nurses' Home, together with the land adjacent thereto. The land offered adjoins 52 acres presently owned by the University.

The West Virginia State Medical Association for several years has endeavored to have a four-year school established in West Virginia so that complete medical and dental education might be provided for West Virginia students who are now required to complete the courses in approved schools outside of the state.

The campaign for the school bogged down in the 1949 session of the legislature when there was disagreement concerning the method of financing and the proper location for the school.

Immediately after adjournment of the 1949 session, the State Medical Association set up a strong committee to continue the fight. This committee was composed of doctors who have been untiring in their efforts to obtain the enactment of the necessary legislation for the establishment of the school. In addition to the fact finding and legislative committee, the Association set up a special committee on four-year school, and a "Committee of 55," composed of a doctor from each

county in West Virginia. These three groups were joined by an active committee from the Woman's Auxiliary, and a real grass-roots campaign was waged throughout the state for several months preceding the convening of the 1951 legislature.

Immediately after the regular session was convened in January, Governor Okey L. Patteson joined the forces of the State Medical Association and a special active group from the West Virginia Dental Society in advocating the enactment of laws to carry out the plans for a four-year school.

In addition to the continuing controversy over location, the matter of financing caused the members of the legislature a great deal of concern. A one cent per bottle tax on soft drinks was finally agreed upon by both the Senate and House of Delegates, and bills providing for such a tax, effective July 1, 1951, were enacted into law.

Officials of the State Medical Association and the West Virginia University Board of Governors agreed to permit Governor Patteson to make the selection for the site of the school, and the legislature finally enacted a bill giving him this authority and directing that the decision must be made prior to July 1, 1951.

Governor Patteson set aside one week for hearing groups favoring a particular site for the location of the school. The deans of several medical schools and authorities on medical education were consulted by the Governor, and a thorough study made by him of briefs filed by professional and lay groups advocating the selection of a site in a particular city.

It is probable that the arrangement with the Medical College of Virginia, at Richmond, for the acceptance of twenty of the thirty graduates each year from the two-year school at Morgantown will be continued until the opening of the four-year school in Morgantown. This arrangement, made several years ago, has worked very satisfactorily, assuring acceptance annually of two-thirds of the graduating class at West Virginia University's two-year school.

DOCTORS INVITED TO VISIT CAMP "KNO KOMA"

A cordial invitation has been extended by the West Virginia Diabetes Association to all doctors in West Virginia to visit the camp for diabetic children during the annual camping period, August 26-September 3.

Camp "Kno Koma" (which is Indian for no coma) is Carbide and Carbon Chemicals Corporation's "Camp Cliffside" near Charleston. Full information concerning the program for the camping period may be obtained by writing Camp Kno Koma, 1115 Quarrier Street, Charleston, W. Va.

MRS. McCUSKEY WINS GOLF TOURNAMENT

Mrs. John F. McCuskey, of Clarksburg, was the winner of the annual Woman's Auxiliary golf tournament at White Sulphur Springs July 19-21. She had a low gross of 83. Mrs. McCuskey also won the tournament last year. Other awards were made as follows: Low net, Mrs. William E. Gilmore, Parkersburg; low putts, Mrs. Charles E. Watkins, Oak Hill; and high gross, Mrs. R. R. Summers, Charleston.

NEW OFFICERS OF SECTIONS AND SOCIETIES NAMED AT ANNUAL MEETING

A new section on radiology was created by the House of Delegates of the West Virginia State Medical Association at the annual meeting at White Sulphur Springs, July 19-21. Dr. Vernon L. Peterson, of Charleston, was named chairman of the new section for the ensuing year, and Dr. W. Paul Elkin, also of Charleston, secretary-treasurer.

Section Name Changed

The name of the section on industrial health was changed to "section on industrial medicine and public health." At the first annual election of officers, held shortly after the change of name was authorized, Dr. W. F. Rogers, of Parkersburg, was named chairman; Dr. N. H. Dyer, Charleston, State Director of Health, vice chairman; and Dr. J. L. Patterson, of Logan, secretary.

Academy of General Practice

The annual business meeting of the West Virginia Academy of General Practice was held following the scientific program presented Thursday afternoon, July 19, at a joint meeting of the academy and the section on pediatrics. Dr. Thomas H. Blake, of St. Albans, was elected president, Dr. Raymond A. Updike, of Montgomery, vice president, and Dr. Halvard Wanger, of Shepherdstown, secretary. Dr. Siegel W. Parks, of Fairmont, was named a member of the board of directors, and Drs. F. Carl Chandler, of Bridgeport, and James L. Patterson, of Logan, were elected delegates to the American Academy of General Practice.

Officers of other sections and affiliated societies and associations were elected at annual meetings held during the convention as follows:

West Virginia Obstetrical and Gynecological Society: Dr. Clarence H. Boso, Huntington, president; Dr. Gates J. Wayburn, Huntington, vice president; and Dr. A. J. Villani, Welch, secretary-treasurer.

Section on Surgery: Dr. Theodore P. Mantz, Charleston, chairman, and Dr. W. W. Scott, Williamson, secretary.

West Virginia Society of Anesthesiologists: Dr. Eldon B. Tucker, Morgantown, president, Dr. John R. Godbey, Charleston, vice president, and Dr. S. Elizabeth McFetridge, Shepherdstown, secretary-treasurer. Doctor Tucker and Dr. John F. Morris, of Huntington, were elected delegate and alternate, respectively, to the American Society of Anesthesiologists.

Section on Internal Medicine: Dr. Pat A. Tuckwiller, Charleston, president; and Dr. Richard N. O'Dell, Charleston, secretary.

Section on Orthopedic Surgery: Dr. R. T. Humphries, Clarksburg, chairman; Dr. D. L. Hosmer, Bluefield, vice chairman; and Dr. Justus C. Pickett, Morgantown, secretary.

Section on Urology: Dr. Thomas G. Reed, Charleston, president; Dr. W. C. D. McCuskey, Wheeling, vice president; and Dr. John F. McCuskey, Clarksburg, secretary-treasurer (reelected).

MRS. JOHN F. McCUSKEY INSTALLED PRESIDENT OF WOMAN'S AUXILIARY

Mrs. John F. McCuskey, of Clarksburg, was installed as president of the Woman's Auxiliary to the West Virginia State Medical Association at a colorful ceremony in the Terrace Dining Room at the Greenbrier, held in connection with the 27th annual meeting at White Sulphur Springs, July 20, 1951. She will hold office until the next annual meeting, July 24-26, 1952. She succeeds Mrs. Ross P. Daniel, of Beckley.

Installation ceremonies were in charge of Mrs. Harold F. Wahlquist, of Minneapolis, Minnesota, president of the Woman's Auxiliary to the American Medical Association.

Mrs. Seigle W. Parks, of Fairmont, was named president elect, and vice presidents were elected as follows: First, Mrs. J. E. Spargo, Jr., Wheeling; second, Mrs. Frank J. Holroyd, Princeton; third, Mrs. Harlan A. Stiles, Huntington; and fourth, Mrs. C. G. Power, Martinsburg.

Mrs. J. Preston Lilly, of Charleston, was elected recording secretary, Mrs. H. V. Thomas, of Clarksburg, corresponding secretary, and Mrs. C. L. Goodhand, of Parkersburg, treasurer (reelected).

Mrs. McCuskey, the former Christine Young, was born at Lost Creek, Harrison County, in 1911, daughter of Mr. and Mrs. L. H. Young; A.B. West Virginia Wesleyan College, and M. A. University of Chicago. She had postgraduate work at Northwestern University and the University of Pennsylvania, majoring in languages. She also holds degrees in music and physical education.

She is a past president, secretary and treasurer of the Harrison Auxiliary. She has been a member of the executive board of the State Auxiliary and served for two years as secretary of that group. She was a member of the committee on organization, serving as chairman, 1950-51.

The new president has always been interested in civic and club affairs in her community. She is a past president of the Clarksburg branch of the AAUW, and served two terms as president of the Clarksburg League for Service. She is now president of the Clarksburg Woman's Club and is the 1951 president of the Women's State Golf Association.

Mrs. McCuskey, who is the wife of Dr. John F. McCuskey, prominent urologist of Clarksburg, and the present co-chairman of the State PR Committee, is the mother of one child, John Fulton, II, who was born when she was nearly forty years of age.

Standing Committees

The following chairmen of standing committees were named for the ensuing year:

Archives, Mrs. John C. Lawson, Williamson; Exhibits, Mrs. C. M. Ramage, Fairmont; Finance, Mrs. H. E. Beard, Huntington; Convention Chairman, Mrs. George F. Evans, Clarksburg; Historian, Mrs. Thomas Bess, Keyser; Legislation, Mrs. Charles L. Leonard, Elkins;

Necrology, Mrs. F. Carl Chandler, Bridgeport; Organization, Mrs. Seigle W. Parks, Fairmont; Parliamentarian, Mrs. U. G. McClure, Charleston; Program, Mrs. Francis J. Gaydosh, Wheeling;

Publications (Editor of News Bulletin), Mrs. Richard K. Hanifan, Clarksburg; Circulation Manager, Mrs. James E. Wilson, Jr., Clarksburg; Press and Publicity, Mrs. Lynwood D. Zinn, Clarksburg; Public Relations, Mrs. A. R. Sidell, Williamstown, and Mrs. Ben W. Bird, Princeton, co-chairman; Revisions, Mrs. W. A. Thornhill, Jr., Charleston; and Today's Health, Mrs. Paul P. Warden, Grafton.

Mrs. John F. McCuskey

Special Committees

Bulletin, Mrs. Gates Wayburn, Huntington; Credits and Awards, Mrs. Newman Newhouse, Charleston; Nurse Recruitment, Mrs. C. B. Pride, Morgantown; Speaker's Bureau, Mrs. W. Fred Richmond, Beckley; Members-at-Large, Mrs. C. R. Davisson, Weston, and Mrs. J. C. Huffman, Buckhannon; and Southern Medical, Mrs. U. G. McClure, Charleston.

Registration Equals 1949 Record

Registration totaled 182, exactly equaling the record set in 1949. The registration in 1950 was 151.

1952 Meeting

The 28th annual meeting of the Auxiliary will be held conjointly with the West Virginia State Medical Association at the Greenbrier in White Sulphur Springs, July 24-26, 1952.

The sense of humor is the oil of life's engine. Without it the machinery creaks and groans. No lot is so hard, no aspect of things so grim, but it relaxes before a hearty laugh.—G. S. Merrian.

S.E. SURGICAL CONGRESS SECTION TO MEET

Dr. John C. Condry, of Charleston, and Dr. S. D. Wu, of Philippi, will be guest speakers on the program at the annual meeting of the Northeastern Section of the Southeastern Surgical Congress which will be held at the Lord Baltimore Hotel, in Baltimore, September 13-15.

Both West Virginia doctors will address a general session on Friday afternoon, September 14. Doctor Condry will discuss "Duodenal Diverticula," and Doctor Wu's subject will be "The Pathology of Colonic Diverticulosis."

Dr. E. Lyle Gage, of Bluefield, will preside at the Friday afternoon session.

The following doctors represent West Virginia on the executive committee: E. Lyle Gage, Bluefield, chairman, Richard D. Gill, Wheeling, Bert Bradford, Jr., Charleston, Francis L. Coffey, Huntington, Charles D. Hershey, Wheeling, A. U. Tieche, Beckley, J. A. Kyle Bush, Philippi, B. B. Richmond, Beckley, and W. G. J. Putschar, Charleston.

Mr. R. J. Wilkinson, Jr., of Huntington, is secretary of the convention arrangements committee.

DOCTOR JARRETT AGAIN HEADS HEALTH BOARD

Dr. William M. Jarrett, prominent Charleston dentist, was reelected chairman of the state board of health at the spring meeting held in Charleston, June 29. He will serve for an additional two years.

Doctor Jarrett has just completed a term as chairman for the unexpired term of the late Russell Bailey, M. D., of Wheeling, who died September 15, 1949. Doctor Bailey had been elected as the first chairman following the creation of the new state board of health at the 1949 session of the legislature.

Mr. J. C. Evans, of Logan, citizen representative of the board, has been reappointed by Governor Okey L. Patteson for a nine-year term ending June 30, 1960.

DR. JOHN T. JARRETT HEADS MCV ALUMNI

Dr. John T. Jarrett, of Charleston, was elected president of the West Virginia Chapter of the Medical College of Virginia Alumni at a business meeting held in White Sulphur Springs July 20 during the State Medical Association's convention at The Greenbrier. Dr. Herbert M. Beddow, of Charleston, was named vice president, and Dr. Marion Jarrett. also of that city, was elected secretary-treasurer.

Two Richmond doctors, Clairborne Robins, president of the MCV Alumni Association, and Hudnall Ware, president elect, were guest speakers at the annual banquet, which was attended by about 75 members and guests.

VALUE OF FORMAL EDUCATION

The great value of formal education is that it is designed to foreshorten human experience. It endeavors with ease and economy to bring each succeeding generation up to date with respect to the past and to make it at home in the world. In this sense, it prepares each generation for life.—Virgil M. Hancher.

WOMAN'S AUXILIARY ADVISORY BOARD

Dr. Sobisca S. Hall, of Clarksburg, president elect of the West Virginia State Medical Association, has appointed the following doctors as members of the Woman's Auxiliary Advisory Board to serve until the next annual meeting at White Sulphur Springs, July 24-26, 1952:

S. Elizabeth McFetridge, Shepherdstown; John F. McCuskey, Clarksburg; Theresa O. Snaith, Weston; Seigle W. Parks, Fairmont; and Francis J. Gaydosh, Wheeling.

HOSPITAL VISITORS

Have you ever considered the problem of hospital visitors? From the patient's viewpoint it seems certain that the fewer the better. They disturb his rest, interrupt his carefully planned routine, interfere with his medications and often his feedings, and tire him to the point of hindering his recovery.

From the doctor's viewpoint visitors are almost totally a menace. They bring in current acute infections; they frequently interfere with the attending doctor's daily check-up and bedside consultation; and all too frequently they are the cause of confusion of ideas and understanding not only of the patient himself but also between the patient and his physician.

From the hospital's viewpoint, visitors are most certainly a great burden and a nuisance. They take up a great deal of the nurses' time in answering endless questions. They crowd the elevators, spread confusion and litter throughout the wards, thus necessitating the hiring of extra help, which in turn increases the cost of maintenance.

Isn't it time we do something about all this? We should start immediately by educating our patients and the public that visitors have no place in the hospital sickroom. One or two only of the patient's immediate family or intimate friends should be allowed visiting privileges, but no more than one or two.—Wm. M. Bollinger, M. D., in Medical Annals of the District of Columbia.

CARCINOMA OF THE PROSTATE GLAND

Carcinoma of the prostate gland, according to a recent Public Health Report, is the third most common cancer. It is outranked in frequency by carcinoma of the stomach and skin. It has been estimated that carcinoma of the prostate gland is found in approximately 5 per cent of all men who reach the age of 60 years. It can be said that 20 to 30 per cent of all men who complain of prostatism, will, in the final analysis, be found to have cancer of the prostate gland.

The majority of prostatic cancer patients are between 60 and 80 years of age. Ten per cent are between 50 and 60 years of age. Very few instances are found below the age of 50. Occult cancers of the prostate follow the same incidence in the state age groups except more occult cancers are found after 80 years of age.—Wm. J. Baker, M. D., in South Dakota J. Med. and Phar.

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ACTH AND CORTISONE THERAPY OF OCULAR CONDITIONS*

By CHARLES M. POLAN, M. D.,
Huntington, W. Va.

The epochal work of Hench and his co-workers in the use of ACTH and cortisone in the treatment of inflammatory joint diseases that was first reported about two years ago has led to a very rapidly developing and widespread use of these agents in the treatment of many diseases, including inflammatory eye diseases. In the past year an ever increasing number of reports on the use of ACTH and cortisone in treating all varieties of ocular lesions has been appearing.[1] The March 1951 issue of the Archives of Ophthalmology was devoted entirely to the use of these drugs.[2]

ACTH (adrenocorticotropic hormone) is a substance extracted from hog and beef pituitary glands. It is produced by Armor and Company and has not been produced synthetically. Cortisone acetate is a steroid compound that has been produced by synthesis and is marketed by Merck and Company under the trade name of Cortone.[R]

Both of these substances, when administered to individuals, give a beneficial response by inhibiting reaction in mesenchyneal structures. Cellular exudation of polymorphonuclear neutrophiles, round cells and eosinophiles is reduced. There is a reduction of capillary permeability to proteins in areas of inflammation. Production of fibrotic reaction in the course of healing is reduced.

The exact mechanisms by which ACTH and cortisone produce their effects in the body are not known but it is apparent that they do not act directly against the injurious agent, be it bacterial, allergenic, or whatnot; but the beneficial response is obtained by altering or blocking tissue response to those injurious substances. Therefore, in treating ocular lesions in general one should use every therapeutic agent in his armamentarium that he is accustomed to using in treating inflammatory lesions. Mydriatics, antibiotics and chemotherapeutic agents still retain their usefulness and one should not neglect nor abstain from using them. A diligent search for foci of infection must still be made and any found should be eradicated.

ACTH and cortisone when used systemically can have serious deleterious side-effects and these should be kept in mind and watched for constantly. Water retention due to disturbance of the electrolyte balance probably is the most important thing to be watched for. Hypertension may be produced. Latent diabetes may show up during therapy. The insulin requirements of diabetics is greatly increased and these patients must be watched carefully. Acneform and pustular lesions may appear. A condition resembling Cushing's syndrome with the appearance of a round face, increased body hair and pigmented straie may result. Heart failure may be precipitated by overexertion.

It does not appear necessary to resort to elaborate precautions to prevent these complications. Careful watching of a few simple tests is all that is necessary to prevent trouble. The fasting blood sugar level should be checked for all patients before starting systemic treatment. Daily afternoon urinary sugar determinations should be made for a few days. Daily

*Presented before the West Virginia Academy of Ophthalmology and Otolaryngology, at White Sulphur Springs, April 28, 1951.

blood pressure and weight readings should be made. Hypertension or rapid weight increase may be indications for stopping treatment. Patients should be cautioned to use salt sparingly and to avoid overexertion.

Both drugs produce a feeling of euphoria. Either may produce emotional or mental disturbances, especially in mentally unstable individuals.

ACTH stimulates the responsive adrenal cortex to produce a cortisone-like substance and through this agent produces its beneficial effect. A good response to ACTH is reflected by a fall in the eosinophile count, which may drop to zero. If the adrenal cortex is nonresponsive or exhausted there will be no therapeutic response and the eosinophile count is not altered. In such an event, cortisone can be utilized. Cortisone is, in effect, a substitution therapy. Thorpe, at a recent meeting of the Association for Research in Opthalmology, warned that prolonged use of cortisone might cause wasting of the adrenal cortex and result in adrenal insufficiency when withdrawn. He advocated minimal daily doses of ACTH to be given along with cortisone when the latter is to be used over a long period of time. The therapeutic response to cortisone can be best judged by the clinical study of the case at hand.

There may be withdrawal symptoms following use of both drugs, and these may be avoided by gradually reducing the dose during the final period of treatment.

ACTH has no local action and can be used only in general administration. The adult dose is 20 to 50 mg. intramuscularly 4 times daily. This may be continued over a long period of time. In children, doses are proportioned according to body weight. Cortisone has in addition a local action and can be given generally or locally. When given systemically cortisone can be administered either intramuscularly or by mouth; and for adults 100 mg. is given three times the first day, twice the second day, and once daily thereafter. The dose for children is not clearly established. It may be disproportionly large.

Cortisone has the advantage of having a local action on tissues. In the eye it can be administered topically in a 1 to 5 dilution, by subconjunctival injection of 0.1 to 0.4 cc., or by retrobulbar injection. Cortone[R] contains 1.5 per cent benzylalcohol as a preservative and this ingredient apparently produces considerable immediate local reaction that may persist for a day or two.

In subconjunctival use the conjunctiva is anesthetized with a few drops of pontocaine and 0.1 to 0.4 cc. cortone is injected beneath the bulbar conjunctiva anterior to the insertion of the superior rectus muscle. There may or may not be considerable chemosis of the conjunctiva which usually subsides within twenty-four hours. A whitish mass remains 4 to 7 days as the absorption is fairly slow. I have had no personal experience with retrobulbar injection of cortisone. Leopold[3] reports considerable edema of the lids and conjunctiva following retrobulbar injection and this mode appears to be the least desirable of all.

Local use of cortisone is very effective in anterior segment disease, but apparently is of little value in posterior segment disease. In the latter, systemic administration is the method of choice.

In the great rush to use these drugs both experimentally and clinically they have been tried out on just about every type of ocular lesion that exists. The greatest benefits have been derived from their use in acute inflammatory lesions. They are somewhat less useful in chronic inflammatory lesions. The benefit in hereditary conditions is questionable and they seem to have little value in degenerative lesions. They seem to be definitely contraindicated in the treatment of tuberculous lesions. There have been a number of reports of cures of sympathetic ophthalmia by the use of these drugs; this one factor alone would justify a permanent position in the ophthalmologist's armamentarium.

Rather than take the time to enumerate all the different disease conditions (and the results obtained) that have been treated with ACTH or cortisone I refer you to the tables and charts in several articles in the March 1951 issue of the A.M.A. Archives of Opthalmology and to other articles listed in the bibliography.

I have treated only one patient with ACTH. I have treated quite a few with cortisone by topical, subconjunctival and systemic administration. I will briefly summarize my experience with these two drugs.

A 35 year old, nulliparous, white female with unilateral optic neuritis was hospitalized and treated with ACTH. Physical examination revealed early pregnancy (her first). The ACTH was stopped after five days because of lack of knowledge of what effect it might have on the fetus. The patient made a slow but steady recovery. Vision improved from 20/200 to 20/25. She later delivered a normal female child.

Two patients with unilateral acute iritis treated with topical cortisone and atropine made speedy recoveries.

A 60 year old, white female had an endothelial dystrophy of many years standing. She was treated with cortisone drops every three hours while awake for one month with no evidence of change.

A 34 year old nurse suffered an abrasion of the cornea by a twig from a Christmas tree. She was seen the following day with a red, painful eye; there was some lid edema. Cortisone drops controlled the pain within twenty-four hous and the patient made an uneventful recovery.

A 9 year old school boy received a corneal injury by the point of a pencil. There was moderate localized keratitis. The eye was atropinized; the next day it was still quite painful. Cortisone drops were started every hour, the eye was comfortable within eight hours, and the patient made a speedy recovery.

A 9 year old school girl had a history of a sore left eye off and on for five years following whooping cough. She had a large, acute, corneal ulcer superimposed on an old vascularized scar. Atropine and cortisone drops were not effective after several days. The ulcer was cauterized with trichloracetic acid with some benefit; but the eye became sore again and now the ulcer had a typical dendritic appearance and was treated with iodine, again with some benefit. It again flared up and this time subconjunctival cortisone was administered and the ulcer then healed, leaving, however, a large, central, vascularized opacity.

A 9 year old colored male had had sore eyes for a year. General examination revealed no foci of infection. Serology was negative. Examination of the eyes revealed a sclerosing type of keratitis. With atropine and cortisone drops the eyes quieted down and became white. Atropine was stopped after three weeks. At that time, March 26, 1951, there was definite clearing of the corneal opacities. Cortisone was to be continued for two more weeks. The child has not returned for observation at this time.

A 27 year old white truck driver had mild episcleritis that resisted usual treatment. Upon addition of cortisone drops both eyes whitened out rapidly and became comfortable. His symptoms had not recurred two months after stopping treatment.

A 4 year old girl had had sore eyes for one year following measles. She had received treatment of all sorts. Examination revealed severe phylctenular keratitis with considerable scarring and some vascularization of the cornea. Atropine and cortisone drops were administered for three weeks during which time the photophobia subsided and the eyes became white and painless. The child could play outside for the first time in nearly a year. Examination by her pediatrician revealed no focus of infection. The chest was clear on x-ray examination and there was no family history of tuberculosis. A month after cessation of treatment redness and photophobia returned. Atropine and cortisone again gave rapid relief of the symptoms. Cortisone drops are being given for an indefinite time. The corneal scarring was clearing slowly when last observed.

A 9 year old boy had a linear extraction of a traumatic cataract. Cortisone drops were started twenty-one days after surgery. A 57 year old white female had a combined extracapsular extraction of a hypermature cataract. Cortisone drops were started twelve days after surgery. Both of these eyes had remained red and sensitive to light after surgery. Following addition of cortisone drops both eyes quickly became comfortable and whitened out. The cortisone did not seem to have any effect on healing of the incisions.

A 6 year old white boy received a laceration of the cornea with prolapse of iris, lens and vitreous when struck by an arrow. The prolapsed tissues were excised and the laceration sutured and covered with a conjunctival flap. The eye remained irritated; cortisone drops were started thirteen days after surgery. The eye became comfortable. Three days later the wound seemed to bulge out a little. Cortisone was stopped. The eye went on to heal. The lens is swollen and completely opaque, but the eye is comfortable and the tension remains good.

A 33 year old white man stabbed himself in the eye with the points of an electrician's pliers April 6, 1951. He received a 6 mm. laceration of the sclera, near the limbus, with a large iris prolapse. The prolapsed iris was excised and the sclera was sutured. The laceration was covered by a flap of conjunctiva. Eight days after surgery the eye remained red and painful. Cortisone drops were instituted and are being continued. The eye is comfortable and is healing well.

A 43 year old white housewife had severe uveitis with secondary glaucoma and massive vitreous exudates. She was given "the works". She was treated in the hospital with atropine, penicillin, streptomycin and fever therapy. Two paracenteses of the anterior chamber were done; no organisms could be cultured from the aqueous samples. General examination revealed chronic

arthritis and much dental infection. The worst teeth were extracted. She was given topical and then subconjunctival cortisone with little benefit. She was then given systemic cortisone in full doses for a total of 1 Gm. The eye quited down rapidly and became white and the patient was discharged from the hospital. She obtained symptomatic relief from the arthritis. Two days later the eye was again red and painful. Exudate was present in the anterior chamber. The inflammation did not respond to penicillin and fever therapy. She was again hospitalized and given full doses of cortisone along with antibiotics and atropine, and again the eye quieted down. She was treated for two weeks in the hospital and then discharged to continue oral cortisone 100 mg. daily at home. During her stay in the hospital all remaining teeth were extracted and healing of the gums was uneventful, even though the patient was receiving full doses of cortisone. The oral cortisone was continued at home for a month with gradual reduction of the dose. The eye remained quiet and painless and there was definite clearing of the vitreous opacities when last seen.

The patients treated with topical cortisone were given the drops during their waking hours. The man who had the scleral laceration received drops every hour around the clock for two days while in the hospital. He was discharged and continued them at home during his waking hours. The 6 year old boy who had the corneal laceration from an arrow was the only one who showed any evidence of poor wound healing while receiving cortisone, and for that reason his dosage was stopped; however, the wound then healed uneventfully.

The total amount of cortisone used in topical treatment is actually minute and absorption is even more minute. Topical cortisone apparently can be administered indefinitely. So far, no reports of systemic reaction or allergy to topical cortisone have appeared.

In my experience, cortisone has given excellent and often dramatic relief from pain and photophobia. When used postoperatively, these patients must be watched carefully as there may be a masking of complications or mishaps.

This has been a very brief review of a broad subject that is expanding by leaps and bounds. We are a long way off from the final answers. Certainly a much greater experience must be attained and a vast amount of data compiled and evaluated before we can hope to arrive at the true value of these agents in ophthalmology.

However, both ACTH and especially cortisone hold great promise of becoming real factors in our field. We should all be curious as to their value and should utilize them judiciously. To those of you who have already used these drugs, this report will be of little value. If there are any who have not tried them, perhaps this will stimulate you to try them out so that you can decide for yourself whether or not they have any value.

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THE NURSE SHORTAGE

What would you do, Doctor, if your office nurse quit and you were unable to replace her? There is no greater threat to the practice of Modern Medicine than the astounding decrease in the number of applicants for nurse's training. This decrease is a horrifying fact. One university school of nursing this spring graduated only six nurses. Last year at another school of nursing there were over a hundred freshmen. This year there are but twelve.

Whatever the cause of this decrease may be, the remedy had better be found and applied by us as a profession or we are going to find an unpleasant and unwanted change in our methods of practice. Let's not kid ourselves about it, either. We have changed from a home to a hospital practice since the last war. The necessity of that era has become the accepted of today.

We used to have a girl in the office chiefly to answer the phone while we were out. Today we find that a graduate nurse makes it possible for us to take care of many more patients by her efficient administration of medications and treatments, while we are examining and diagnosing new patients. Just what would you do if you could not get another nurse in your office when this one quits? And what are you going to do when your hospital is unable to remain efficiently open because there are not enough nurses to keep it going?

This may not be your problem, Doctors, but you had beter make it so. These comments and questions are not fanciful flights of the imagination. In view of the drop of enrollment in nurses' training, the problem is acute. We must, as individuals in our profession, spread the gospel of the advantages of a nurses training to our young women and their parents.
—L. J. Pankow, M. D., in So. Dakota J. Med. and Phar.

PULMONARY RESECTION FOR THE SOLITARY METASTATIC LESION

By R. W. POSTLETHWAIT, M. D., Kinston, North Carolina, and CHARLES B. HANNA, M. D., Charleston, S. C.*

Although pulmonary resection for metastatic sarcoma and carcinoma had been reported previously in a few isolated cases, Alexander and Haight[1] in 1947 first pointed out clearly the possible applications of this procedure. In one of the earliest reported cases, published by Barney and Churchill,[2] the patient was alive and well 12 years after pulmonary resection of the metastatic tumor, and a patient operated on by Edwards[3] was living without recurrence 18 years after the lung resection for metastatic sarcoma of the fibula. Such long survivals suggested to Alexander and Haight and other investigators the advisability of re-evaluation of the prevalent opinion that a metastatic pulmonary lesion means a hopeless prognosis.

Excellent summaries with additional case reports were published by Alexander and Haight,[1] Effler and Blades[4] and Seiler, Clagett and McDonald.[5] The interesting papers by Mandeville[6] and by Sommer[7] covered certain aspects of the same problem. Seiler, Clagett and McDonald collected 52 cases from the literature and added ten more from the Mayo Clinic. The primary tumor type was stated in 57: 18 were sarcomas, 35 were carcinomas and four were mixed tumors. The most common primary site was the large bowel, with 11 cases, of which six were rectal in origin. Of the others, seven were fibrosarcomas, seven hypernephromas and five were carcinomas of the ovary. The interval between the time of removal of the primary tumor and that of the appearance of the metastases was variable but usually was from one to four years. Bronchial involvement was mentioned in 27 cases and was present in 63 per cent of these. The longest survival periods were: one case, 18 years; one case, 12 years; one case 7 years; one case, 6 years, 2 months. Twenty-three of the 62 were living and well at the time of the case reports; two had lived more than ten years, seven from three to ten years and the remaining from a few months to two years. The operative mortality was 10 per cent.

Alexander[8] aptly stated, "The patients and the surgeons who deal with this condition are confessed gamblers." It is apparent, however, that the possibility of cure or prolonged arrest is well worth the chance. An extremely thorough examination supplemented by all the applicable x-ray and laboratory investigations must be employed to determine whether or not the primary tumor has been completely eradicated and to make sure that no metastatic lesions other than the pulmonary one are present. Obviously the accuracy of such a survey is limited to a certain extent with regard to the primary lesion and to a considerable degree concerning other metastases. Recognizing these limitations, and provided the patient's general physical status is satisfactory, the solitary pulmonary metastatic lesion probably should be resected.

Four additional factors favoring such resection warrant brief consideration: First, the pulmonary metastatic lesion may provide a focus from which tertiary colonization may occur. Second, the pulmonary lesion may be a second primary tumor rather than a metastatic one. Third, removal of a metastatic pulmonary lesion may provide effective and prolonged palliation even if cure is not obtained. Fourth, the lung resection usually is technically much easier than for primary pulmonary malignancy or infection and an appreciable decrease in the operative mortality from the reported level should soon be apparent.

CASE REPORTS

Case 1.—A 38 year old colored female came to the clinic June 15, 1949. She had noted a mass in the right breast in April 1948. In March 1949 her local physician performed a simple mastectomy and after receiving the pathologic diagnosis of carcinoma referred her for further treatment. Her general physical examination was normal except for evidence of aortic insufficiency. The simple mastectomy wound was well healed. Several small discrete nodes were felt in the right axilla. Serologic tests for syphilis were positive. The routine x-rays were negative. On June 17, 1949 operation to complete a radical mastectomy was carried out. Histologically, no tumor was found in the scar or the muscle but the axillary lymph nodes contained metastases. Her postoperative course was uneventful and she returned to the clinic regularly without complaints until a year later.

On June 15, 1950 she complained of pain in the shoulders and a slight cough which on one occasion had been productive of a small amount of blood. All examinations were normal with the exception of the chest x-ray which showed a solitary lesion in the posterior segment of the left lower lobe. She was admitted to the hospital for more careful studies, all of which were negative. By July 20, the lesion had enlarged slightly. Left lower lobectomy was performed, with a smooth recovery. A single area of metastatic

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carcinoma from the breast was found on pathologic study. She has had no further symptoms and nothing to suggest recurrence to the time of her last visit February 15, 1951.

Fig. 1.—The rounded area of increased density is seen in the left lower lung field in case 1.

Case 2.—An 18 year old colored boy was first seen September 26, 1949. About one year before he had noted intermittent aching pain just above the left knee. Following minor trauma four months prior to admission, swelling developed above the left knee and he walked with a limp. On the morning of admission, the knee suddenly became very painful and he was unable to walk.

The general examination was not remarkable. The left knee was fixed in extension and just above the joint the leg was hot, swollen and tender. X-ray showed a mottled area of destruction in the distal third of the femur measuring 12 x 4 centimeters. The shaft of the femur was uniformly expanded, the cortex thickened and coarse and a transverse fracture was seen in the upper portion of the involved section. The lungs were clear. Irradiation was given to total 3000 r without effect on the tumor. Biopsy was then done and the pathologic report was osteolytic, osteogenic sarcoma. A high thigh amputation was performed and the histologic studies confirmed the biopsy.

His course was then uneventful until a routine chest x-ray in June 1950 showed a small rounded area of increased density in the left lower lobe. The lesion increased in size very slowly. The patient and his mother were reluctant to accept further operation. Finally, in October, he was transferred to the Medical Division, Oak Ridge Institute of Nuclear Studies for special radioactive isotope studies. No demonstrable change occurred in the lesion and on November 3, 1950 operation was performed by the authors. The metastatic lesion was found at the interlobar fissue, involving both the lingula and the lower lobe. In addition, a 3 millimeter, firm, smooth area was palpated in the upper lobe. Pneumonectomy was therefore carried out. His postoperative course was not remarkable. Because of the unusual findings, the pathologic studies will be the subject of a later report by those at Oak Ridge who carried out the radioactive isotope studies. At the time of the patient's last visit in February 1951 no evidence of recurrence could be demonstrated.

SUMMARY

Two cases of pulmonary resection for metastatic lesion, one from a carcinoma of the breast and the other from an osteogenic sarcoma of the femur, are reported. The periods of follow-up are inadequate, but these patients serve to illustrate the principle of this procedure. If the primary lesion has been eradicated, the presence of other metastases excluded and the physical condition of the patient satisfactory, pulmonary resection offers a change for cure and an excellent possibility for palliation. The available evidence suggests that routine chest x-ray should be an important part of a cancer follow-up program in order to select a larger number of patients for this procedure.

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YOUR STATE SOCIETY—THE HOME FRONT*

By R. D. BERNARD, M. D.,
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Great strides have been made in medical service by the American Medical Association since a resolution, which originated in the North Central Conference, was presented to this organization at its meeting in 1943. This resolution requested the House of Delegates of the American Medical Association to authorize the formation of a Council on Medical Service and Public Relations and establish a Washington office.

The reorganization of its public relations policy and its assumption of the offensive, in contradiction to a defensive position, has placed the American Medical Association in the foreground of defenders of our American way of life and the right of American people to enjoy the best medical care of any nation in the world's history.

This morning I wish to call your attention briefly to a few of the problems and objectives which confront the state medical society at the grass roots which, in reality, constitutes the home front in an overall analysis of our fighting forces.

Formation of regional groups of states, loosely banded together for discussion of mutual economic and legislative problems: These groups have been recognized and modified by the American Medical Association to promote discussion of problems in an informal way and at a level only slightly above the home front. The regional meetings of the Council on Medical Service and the recent district meetings of the Legislative Committee of the American Medical Association are excellent illustrations of this new method by which information is disseminated by direct approach from the top level to the home front level. If you will study the various methods our state societies have devised during the past few years to improve public relations, which in the last analysis means better medical service, you will realize great progress has been made in building up an impregnable defense of our present system of medical care.

Many states have a single medical service unit which through its subcommittees establishes liaison with lay groups in cancer and tuberculosis committees, veterans' organizations, labor and various health organizations. This does conserve manpower, makes a few excellent men responsible for the success of their program but lacks a broader approach of other states which prefer to have special committees of five to eight members assigned to meet with these groups and assist in their activities. The important thing is whether or not these committees are actually doing the job. Are the members of these committees in the driver's seat, behind the driver or merely passengers on these various lay committees? Is there close cooperation between your society and state cancer committee, state tuberculosis committee and the state polio committee? Their drives have a powerful appeal. Vast sums are being collected. Are you consulted concerning the distribution of the reserves which these committees have acquired? Are you acquainted with the details of cost of polio treatment and hospitalization? From my limited field of observation, I am astounded at the staggering cost for hospitalization and nursing in this particular field and yet no one can deny the enormous value of these lay organizations. I believe that the fine people who devote much time to these drives deserve great credit and the full time administrators are, for the most part, doing fine work. They will welcome active intelligent cooperation of state medical committees who will team up with them and assist in guiding their courses.

I am much concerned with the question "do we need more doctors?" Regardless of your opinion, what have you done to prove that your opinion is correct? It is my feeling that this should be answered in terms of service to the public. Are the physicians distributed geographically and with adequate age groups to render satisfactory service? This is definitely a home front problem. We in Iowa are now conducting such a survey. We are trying to determine the service rendered by our physicians in each county. We want to know whether or not the community is receiving adequate medical service at night. Is the obstetrical service adequate, is the physician, due to age or physical disability, practicing only part time, et cetra? We propose to follow up this survey by further questioning in certain locations in an attempt to find the answer to some of the more difficult questions such as where relocation or the addition of doctors will solve the service problem.

The need for more general practitioners is now generally accepted. Here again the home front can and should be the activating factor—increasing hospital facilities, adequate office facilities and a guiding hand for the student through medical school which, working hand in hand with the state medical societies, will do much to balance the output of the finished medical product.

*Address of the chairman before National Conference on Medical Service, Chicago, February 11, 1951.

Scholarship funds have been and still are valuable in three ways: First, if established as a state society project, most members take pride in watching their contribution build up the fund. They realize that their dues are really "doing something" to assist the deserving student. We appreciate the rich benefactor who establishes funds of this nature but the real thrill is actually becoming a part of it. Second, the medical schools, especially the state schools, realize that the state society is putting its shoulder to the wheel to boost—not knock. It will increase the interest of the organized profession in the faculty, their objectives and problems and promote cooperation. Third, the student is given a practical boost just when he needs it most. His admiration for the profession will increase for he knows he has friends willing to stand by him and assist him. He starts out in life appreciating the value of Organized Medicine. Our State Society educational fund is functioning very well.

A large cross section of the American population, through its increased interest in public health projects and its education, in the doctor's office, in lay periodicals, and in public school and college teaching, has grown to expect more thorough examinations and scientific tests and is in a large measure responsible for the increase in medical care costs. The younger doctor is trained, and rightly so, to depend upon these facilities to assist him in diagnosis. However, a carefully prepared history, a thorough physical examination, plus a good dose of keen diagnostic perception, will solve many of the problems of diagnosis which are now made by expensive laboratory methods.

Another factor in the cost of medical care is the present level of medical and surgical fees. This is a problem to be solved at the state level. The average fees being charged throughout the country probably are not too much out of line with the increased costs (or expense) involved in rent, transportation, professional assistants and the cost of living. We have always had, and always will have, a certain few who charge all the traffic will bear but these are a very small minority.

Blue Cross and Blue Shield, and similar prepaid protection measures, are doing a great job. Are your doctors doing their share in selling your Blue Cross and Blue Shield which are a most valuable weapon to use in defeating the government insurance scheme? The least expensive, the surest and, I believe, the easiest place to defeat government control of the practice of medicine is in the doctor's office, which is the home front.

For the past three years a large portion of the work of our field secretary has been devoted to calling upon the members of the State Society, explaining in detail our medical service plan and conducting schools of instruction for the physicians' office assistants. Plans are now under way to continue this program by the addition of four full time men. Blue Shield will share in this added cost.

Have you fully explored the value of improved public relations, which means better medical service in an augmented interprofessional or allied professions' program? This group, which includes druggists, dentists, veterinarians, nurses and hospitals, can solve many of our problems. A better understanding of mutual problems, a better distribution of medical care throughout the state, reduction in counter prescribing by druggists, more care in writing prescriptions, and so forth, will result from such meetings.

We have sponsored, during the past six months, 32 of these meetings at the district level. The attendance has been excellent. One result which we feel is a distinct compliment is the request by outstanding members of the legal profession to be included as guests during our 1951 program.

Grievance Committees have been accepted and encouraged in any public relations program. Better medical service is apparent even at this early date. A study of their reports, with an analysis of their overall findings, and the proper transmission of their information to the profession, plus well supervised press relations will do much to increase the effectiveness of this committee.

MEDICAL-PRESS-RADIO PROGRAM

This program was instituted to develop better understanding and closer relations between the doctors, hospitals, nurses and the press. Following the first meeting of the medical-radio-press conference in the fall of 1949, our State Society was asked to send a physician to participate on a panel for the annual meeting of the Iowa Radio News Editors Association. It was after this meeting that we completed a code of cooperation and asked its approval by the associations represented at the meeting.

These codes spell out, in detail, the responsibilities of all parties in the providing and reporting of medical news. The developing of this "Code of Cooperation" has been definitely a cooperative affair. We have had official representatives of the above named groups at all our planning meetings. This complete representation has assisted us in working together harmoniosly

and has afforded us an apportunity to discuss other problems with these representatives even though they may not pertain to medical news relations. Interest in this project has been excellent from the start and our 1950 all-state conference was exceptionally well attended.

Television is becoming a factor in health education and its progress is, of course, limited at the present time, but a program such as that developed by the Illinois State Medical Society is most encouraging. We cover a little over 25 per cent of the population of the state. The response is favorable and we hope to expand our programs as soon as facilities are available.

The growth of interest in public health and in public health organizations is phenomenal. Have you checked them lately? Their membership is all inclusive. The American Legion, other veterans' organizations, women's clubs, welfare organizations, farm groups, educational groups, et cetera, all are united under this public health flag. Their members are serious, intensely interested in health problems; their leadership in all communities is well established and many of their leaders are outstanding in their communities. What is the relationship of your county society to these groups in areas in which their leadership is unsatisfactory? Are you a part of them? Can you direct their activities? Are they conducting immunization programs AFTER asking your cooperation or is the reverse true? Are you assisting them in developing their programs or is this done by lay groups and you merely assist them? Has the county society assumed the leadership and requested their cooperation? Are you sure that ALL of the groups are against socialized medicine? Are you interested enough to assist them in selecting their radio programs? Did you read the Ewing survey questions on child health? These people are your patients—your neighbors—your teachers of your children—members of your school boards. They are honestly trying to make your city a better place in which to educate their children and in which to live. Business men in the organizations just can't understand why their doctor isn't more interested in such projects.

One of the biggest—if not the biggest—home front jobs the medical profession has today is to take an active working interest in this vast organization. The usual excuse "I am too busy practicing medicine to take an active part in such organizations" is not the solution. If we, as a profession, can direct the thinking and activities of this group—on the home front—we can match the fine work which has been done at the national level.

In this brief resume of state medical society activities, I have attempted to direct your attention to the activities of the profession which improve public relations, which educate the public in American medical research and practice and our consistent efforts to improve medical service. We must render the best type of medical care in the office, home or hospital, and this will become the most important weapon we have today to defeat the socialization of medicine.

THE TOBACCO HABIT AND PEPTIC ULCER

Few ucler patients seem to have suitable relaxation and recreation. On the surface they may seem to be fairly well adjusted, but upon close investigation you will find that they are as much at fault in this regard as in their attitude toward their work.

A game of golf with a customer is not very relaxing, and merely belonging to a country club without using it regularly means nothing. It must be impressed upon these people that they should leave their work at the office and for a period each day devote themselves to some form of recreation entirely divorced from their usual work.

In the beginning they will have to concentrate upon this almost as much as they do on their work and get over the idea that doing something that is not directly or indirectly profitable or worthwhile is a waste of time. The reading of detective stories is sufficient for some men. A definite hobby is of tremendous importance. The development of social contacts may be the answer.

A definite attempt should be made to break the patient of the tobacco habit. Unfortunately, too many of us are actual addicts, and to stop smoking is almost impossible. The physician must make up his mind as to whether the psychologic strain of trying to give up the "weed" is more deleterious than the organic effects of continuing its use.

The adverse effects of tobacco are threefold: 1. Nicotine absorbed into the blood stream in sufficient quantities depresses the sympathetic nerve endings, thereby allowing the vagus to have greater effect, which results in increased gastric secretion and motility. 2. The tars and other substances that are dissolved in the sputum when swallowed act as a gastric irritant. 3. The appetite is decreased.

It may be impossible to make the patient give up his cigarettes, and if this be the case he should be continuously urged to cut down drastically on the number that he consumes and to use a filter type of holder, which at least removes some of the more irritating substances.—Wm. T. Gibb, Jr., M. D., in Medical Annals, District of Columbia.

Predisposition to ulcerative colitis may be due to an overindulgent living mother; that to duodenal ulcer to a prematurely dead mother.—W. S. R. in Detroit Med. News.

DISEASES OF THE LARYNX*

By JAMES T. SPENCER, M. D.,
Charleston, W. Va.

There are a multitude of disease entities affecting the larynx. Many are quite common and may be seen almost daily in the practice of the otolaryngologist and not infrequently in general practice. There are less common laryngeal disorders which many times the laryngologist sees only after a considerable interval. It is often the case that only a provisional diagnosis will be made at the initial office examination of the patient. Whatever the case, the presence or absence of laryngeal disease can be determined in nearly 100 per cent of patients by one relatively simple examination, namely, inspection of the larynx with a laryngeal mirror. Mirror laryngoscopy should be a routine practice of otolaryngologists in the course of making a complete examination of patients, whether the patient presents symptoms of laryngeal disease or not. With patients presenting symptoms referable to the larynx or hypopharynx, mirror laryngoscopy is the *sine qua non* in making an early diagnosis. Yet it is with surprising frequency that such patients are treated empirically by their first physician without the benefit of a satisfactory mirror laryngoscopy. Many carcinomas of the larynx have waxed extensive during these periods of trial therapy.

MIRROR LARYNGOSCOPY

The technic of mirror laryngoscopy is presented in our standard texts of otolaryngology and physical diagnosis. Proficiency is readily obtained, but not by the occasional examiner of the larynx. Complete familiarity with the normal anatomical landmarks of the larynx and recognition of what constitutes normal motility of the larynx is essential before the examiner can evaluate the abnormal or diseased larynx. The value of routine examination of the normal larynges is thereby emphasized, attention being given to laryngeal appearances during quite breathing, on phonation and during coughing. Familiarity with the normal larynx and with its normal variations better qualifies one to recognize real pathology or abnormal functioning in its earliest development.

DIRECT LARYNGOSCOPY

Where difficulties are encountered that will not permit a satisfactory mirror laryngoscopy, a direct examination with the aid of a laryngoscope is indicated. In infants and small children direct laryngoscopy usually is necessary to evaluate the larynx. Direct laryngoscopy compared with a satisfactory mirror laryngoscopy usually is inferior in value for diagnostic visualization of the larynx. The laryngoscope is of particular value in the inspection of blind areas that may exist, such as the anterior commissure, the ventricles, subglottic region, the pyriform sinuses or postcricoid region.

Intralaryngeal operative procedures either for biopsy of lesions or for removal of benign growths are best accomplished by direct laryngoscopy under local anesthesia. Hospitalization and adequate preoperative sedation of the patient greatly increase the ease with which these procedures may be accomplished both for the patient and the operator. Only the very occasional patient requires general anesthesia, and this leaves much to be desired at it usually is helpful to have the patient phonate on request during these procedures. Suspension laryngoscopy under general anesthesia, though used routinely in some clinics, is thought to be a more formidable and less simple method of direct laryngoscopy.

SYMPTOMS

The common symptoms presented by patients with laryngeal disease is hoarseness. Hoarseness is that voice disturbance produced only by interference with the normal vibration, approximation and tension of the vocal cords. Other voice disturbances resulting from nasal or pharyngeal obstruction, paralysis and fixation of the tongue by neoplastic disease and paralysis of the palate are not considered as hoarseness and must be differentiated. Lesions of the larynx may occur in those areas that do not produce voice disturbances and thereby remain quite silent except for more or less vague sticking or burning sensations in the throat often aggravated by swallowing. This is particularly so with lesions of the epiglottis, the aryepiglottic folds and those bordering on the pyriform sinuses. Cough and expectoration may become associated symptoms. If the lesion is sufficiently large or obstructing there will be a varying degree of obstructive laryngeal dyspnea with stridor. This latter situation is the common symptom of bilateral abductor paralysis of the larynx in which condition the voice usually is normal. If a paralyzed vocal cord is in an adducted position with good tension, as is often seen, the voice will be relatively normal. Considering the ease with which this error might be made a preoperative and postoperative mirror laryngoscopy of thyroidectomy patients should be a routine practice in those cases in which the surgery has been in the vicinity of the recurrent laryngeal nerves.

*Presented, with the author's movies on "Diseases of the Larynx," before the West Virginia Academy of Ophthalmology and Otolaryngology, at White Sulphur Springs, April 20, 1951.

HOARSENESS

Hoarseness is an indication of laryngeal dysfunction and the larynx should be studied until the cause is determined. A negative opinion is valueless until the entire larynx is visualized. When hoarseness persists beyond a few days the larynx should be examined. This is important even with acute laryngitis associated with respiratory infections as the degree of inflammation can be observed and treatment more judiciously outlined. With proper evaluation chronic inflammatory lesions that are so commonly seen would not ultimately develop. Also, if this procedure became habitual, cancer of the larynx would be detected at its incipiency in better than 80 per cent of cases and would thus be practically 100 per cent curable. Patients with carcinoma of the larynx more often than not date the onset of their hoarseness from the advent of a "little laryngitis" months previously.

Hoarseness may be a manifestation of disease that is primary in the larynx, or it may be a local manifestation of disease elsewhere. The local disturbances commonly seen are benign and malignant neoplasms, acute and chronic inflammatory and granulomatous lesions, syphilis, tuberculosis and vocal cord paralyses. Tuberculous laryngitis is secondary to pulmonary tuberculosis but not uncommonly is the cause of the patient seeking medical attention for hoarseness. Paralysis of one or both vocal cords may result from injury or disease affecting the recurrent laryngeal nerves or vagi, or it may result from more central lesions.

Paralyses are not infrequently seen following thyroidectomy, or may be associated with malignancy in the chest and neck, or they may be due to pressure of an aortic aneurysm, or secondary to cerebrovascular accidents, or to toxic and infectious neuropathies.

BENIGN LESIONS

Benign lesions of the larynx may be in the nature of polyps, vocal nodules, cysts, papillomas, fibromas, contact ulcer and chronic inflammatory hypertrophic changes in the mucosa. Keratosis is fairly common and, though potentially malignant, is a form of benign hyperplasia of epithelium. Congenital lesions are seen occasionally in the form of webs, cysts and stenoses, and manifest themselves usually by causing laryngeal stridor.

MALIGNANCY

Malignancy of the larynx occurs primarily in the form of epidermoid carcinoma. From the statistics before us today it comprises about 5 per cent of all malignant tumors, and its frequency appears to be on the increase. In two-thirds or more of the patients the vocal cord is affected early and the voice impaired. The most common site of occurrence is along the free edge of the vocal cord but it may arise on any of the laryngeal surfaces, either interior or exterior. These lesions may spread in any direction, anteriorly, posteriorly, superiorly or subglottically. Extralaryngeal spread may be directly, as through the prepiglottic space, or by way of the lymphatics to regional nodes about the bifurcation of the carotid artery. In its early stages and for a while thereafter, hoarseness may be the only symptom. Laryngeal cancer is at first quite painless, the development of pain being evidence that the disease is becoming advanced. This pain, rather than being in the larynx, usually is referred to the ear on the side of the lesion. Dyspnea develops as the lesion fills the airway and becomes obstructive.

DIAGNOSIS AND TREATMENT

In the treatment of benign and malignant lesions of the larynx one's first concern is diagnostic. The diagnosis of a particular lesion is established when tissue is removed and examined histologically, with the aid occasionally of roentgen and serologic studies. A rather accurate provisional diagnosis can be made as a rule from the appearances of the lesion. At times it is difficult to differentiate such lesions from chronic inflammatory lesions, tuberculosis, syphilis and cancer. Roentgen study of the chest, serology and biopsy will make this differentiation possible as a rule. In the treatment of benign lesions of the larynx, and those affecting the vocal cords in particular, the lesions are removed primarily to restore the normal voice. This requires that particular care be exercised in removing these lesions in order to leave a smooth cord edge. Removal of most benign lesions of the larynx is readily accomplished by direct laryngoscopy under local anesthesia using one of several cup forceps, occasionally a snare, or shears. Although all tissue is submitted to the pathologist for diagnosis, the important function is taking infinite care to get the best cosmetic result possible.

In the treatment of malignant lesions of the larynx, the primary concern is confirming the diagnosis by biopsy and then deciding on a plan of therapy that will save the patient's life. The voice is of secondary importance. Fortunately for many of those in whom the diagnosis is made early, the removal of one vocal cord by thyrotomy permits complete extirpation of the cancer, a 95 per cent chance of cure, and leaves the patient with a very useful voice. For those patients

whose lesions are too extensive for thyrotomy, total laryngectomy is necessary, provided the lesion has not gone beyond the limits of operability. Even in those cases in which anterior cervical nodes are palpable with obvious local metastases, total laryngectomy and block dissection of the neck offer the best opportunity for cure. Radiotherapists are able also to cure some of the carcinomas of the larynx but, from evidence available, more lives are being saved by surgical treatment than by irradiation.

The laryngologist's real problem in these cases is determining the exact extent of the lesion. Mackenty made the statement that "it is wise to add two-thirds to the visible portion of the growth in estimating its actual size." This is rather common experience because when the larynx is opened at the time of surgery, the lesion usually is much larger than suspected. No patient should be deprived of thyrotomy or laryngofissure when it will permit ample removal of the cancer. At the same time, to try to save the larynx and some voice by performing a conservative procedure for a cancer too extensive for thyrotomy, you will most likely rob the patient of his chance for any cure at all. It is generally agreed that one chance is given to cure carcinoma, and the physician who has that first chance had better "shoot to kill."

No attempt will be made here to outline all the points that help determine the indications for thyrotomy and for laryngectomy. The lesion limited to one vocal cord without impairment of motility is ideal for thyrotomy. If it is felt that the lesion cannot be completely removed in this manner, then total laryngectomy is the treatment of choice. Laryngectomized patients as a whole are very happy, well adjusted individuals who are very thankful to be alive. Many develop excellent voices of their own again, others use artificial devices for the production of a voice quite ingeniously.

In summary, the importance of early diagnosis is stressed. This demands a meticulous and painstaking study of the larynx. When carcinoma of the larynx is detected early, with the exception of cancer of the skin, it is the easiest to cure completely.

The incidence of early syphilis in West Virginia is about 10 percent of what it was in 1945. But there is still a backlog of late syphilis.—Health Views.

It has been estimated that each year in the United States, 12,000 women die from breast cancer, and that approximately 4 per cent of all female adults succumb to the disease.—R. N.

ADVISORY GROUPS IN PUBLIC HEALTH ADMINISTRATION*

By N. H. DYER, M. D., State Director of Health
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Because of the difference in names applied to the various advisory organizations in public health, both on the state and local levels, the general term "advisory groups" is used in this discussion. But, regardless of the name used whether a council, committee or a board, it is a group of individuals organized to assist in the promotion and expansion of public health services provided by the health department, and to stimulate the inclusion of new needed services.

As to the method of establishment, advisory health groups may be classified as follows: 1. Official; 2. Semi-Official; 3. Voluntary.

1. *Official:* The term, official advisory group, may be given to that group officially set up by federal or state law; the members to be appointed by the chief executive. Such a group is usually provided for in legislation establishing a new or specialized program administered by a federal or state agency. An example would be the State Advisory Council for hospital construction under the Hill-Burton Act. Even though this group is officially appointed, it is advisory only to the agency designated to administer the hospital construction program. But, since its recommendations are almost always followed, the council, in effect, participates in the formulation of policy.
2. *Semi-Official:* By semi-official groups is meant those advisory groups created by appointment of members by a chief governmental agent or a department head on the state or local level. These appointments are not authorized by law, but are usually requested by citizens or other interested groups of the state or county. Such a group does not participate in the policy making and acts purely in an advisory capacity.
3. *Voluntary:* The voluntary group classification includes those citizen groups set up on a voluntary basis, and the stimulus for such an organization usually comes from within the community. This classification includes the largest number of advisory group members.

We can further classify these advisory public health groups based upon services given by placing the min two general classifications: first,

*Term paper presented before the School of Public Health, University of Michigan, Ann Arbor, Spring of 1951.

the constituent; and, second, the technical. The chief services of a constituent advisory group is to act as a medium through which the community and the health department are advised of plans and actions. Technical advisory groups are created to give technical advice to the officers of the administrative agency in planning and carrying out the development of techniques of value in the public health program.

Regardless of the particular type or classification of a proposed advisory public health group, there are certain criteria which should be considered in organizing such a group. It would not be practicable to specify a certain number of members. This will vary with the type of organization and the basic health needs of the community, but generally speaking the number should be kept low enough to utilize individual thinking in the over-all group planning. The handicap of a large membership may be overcome by the appointment of sub-committees to study special problems and report back to the main group.

The advisory group members should be selected according to previously agreed principles. Careful consideration should be given to the distribution of membership according to community group representation. Generally, the official governmental and voluntary health agencies, the professional groups interested in public health and members representing the consumers group should all be included in the membership of the advisory group. Proven leadership and availability for work are valuable assets. The geographic distribution of members with particular emphasis on the location of the existing or proposed health unit is recommended. It would be beneficial to interview the prospective members to determine the amount of interest in public health activities and their willingness to serve.

The broad functions of an advisory health group, whether on the state or local community level, may be stated as follows:

1. Study health needs of the community through appraisals, inventories, analysis of data and health fact finding activities.
2. Work to prevent overlapping and duplication in health services provided by various official and voluntary agencies.
3. Advise and assist responsible agencies to provide health programs related to the community need and facilities available.
4. Coordinate as far as possible the thinking and planning of all organizations concerned with the public health services.
5. Stimulate the general public interest in health problems and the ways and means to solve them.
6. Render assistance in the passage of needed health legislation.
7. Stimulate interest in establishing full-time health units in areas not covered by full-time public health services. More adequate health services should be encouraged for the full-time units.
8. Coordinate the thinking and planning of the established advisory groups of county and state levels.

The following guiding principles should be beneficial in promoting the activities of an advisory health group:

1. The health department personnel should recognize those areas in which the advisory group can work more effectively than the official health agency.
2. All the responsibilities of the advisory group should be well defined and understood.
3. The advisory group should understand the official lines of authority connected with the administration of a health department, and that the advisory group cannot act independently of the health officer.
4. The advisory group should tackle only the problems it can handle and follow through once activity is begun.
5. All recommendations made by the advisory group should be carefully considered by the health department and followed if the recommendations improve the quality of public health service in the community.
6. Meetings must be frequent enough to hold the interest of the group, but not so frequent that the meeting may become tedious and tiresome.
7. In dealing with health education problems, the materials must be of such scope as to stimulate and continue interest. Individual thinking and participation must enter into the development and solution of the problems.
8. Professional citizens should be available to interpret data and advise and guide the group in dealing with the relation of professional matters to the public health services.

Regardless of how such an advisory group is created, once established, it should perpetuate it-

self by an organization sufficient for the community health needs; and should work independently of any governmental agency. Any community can profit by having a well organized smooth functioning advisory health group (whatever the specific title may be) to disseminate accurate health information to develop community understanding of the unmet health needs. Once these needs are identified all interested health groups should coordinate their efforts to supply these needs.

PATIENT'S RESPONSIBILITY TO THE DOCTOR

Much has been written during the past few years about the doctor's responsibility to his patient—financial, legal, and personal. But little has been said of the patient's responsibility to his physician. One example of this is the matter of "doctor's orders."

Many patients fail to take the physicians' instructions seriously, not realizing that even minor deviations. (e. g., the salt-free diet for cardiacs) may completely thwart the therapeutic goal. Similarly, modern drugs are of such potency that self-guided variations in dose may defeat the purposes for which they are prescribed The digitalis group exemplify this principle most prominently. In addition, timing of medication (as with insulin for instance) may be of paramount importance in achieving the best results.

Certain patients make a habit of changing physicians capriciously if the first fails to achieve an immediate therapeutic miracle. Such a patient does himself a great disservice, for were he to return to the first physician, he would be referred to the proper consultant for further examination and advice as to treatment. This is not to imply that a patient should never change his doctor; at all times the patient's free choice should be his jealously guarded prerogative. But in general, the patient will receive better management if he chooses a single guiding hand at the helm.

Another difficulty is the promiscuous acceptance of lay advice in health matters. Having chosen a physician to be his mentor in such affairs, the wise patient consults him about all questions concerning iliness, its treatment. and prevention. Nowhere is this more important, and more abused, than in obstetrics, where —for obvious reasons, old wives' tales sound authoritative.

Finally, there are those patients who prefer to bypass the family physician, and seek out specialists on their own initiative. Such patients run a real risk of missing the best treatment for their illnesses, since one of the prime attributes of the family physician is the ability to analyze his patient's problems, and formulate a logical step-wise attack that will be sound from the aspects of time, finances, and medical effectiveness.

More widespread understanding by the patient of his responsibilities to his physician will result in a more effective, more economical, and happier patient-doctor relationship.—R. D. G. in J. Med. Soc. New Jersey.

A METHOD OF REMOVING FOREIGN BODIES FROM THE NASAL CAVITY WITHOUT INSTRUMENTS

By KENNETH D. BAILEY, M. D.
Fairmont, W. Va.

A frequent problem of the physician treating children is foreign bodies which have become engaged in the nasal cavity. This is particularly true of those children under six years of age. The objects vary as to size, consistency and contour, depending on the object to which the child had access.

Most of us have gone through the rigors of attempting to remove smooth surfaced objects from the nose with forceps, including glass beads, beans, etc. Equally difficult objects are certain species of seed which swell tremendously upon contact with the moisture of the nasal mucosa.

I should like to describe a method which I have found successful, but which does not appear to be commonly used.

It is as follows:

(1) Place the patient on his back.
(2) Cover the patient's mouth with one layer of a clean white handkerchief.
(3) Occlude the nasal orifice opposite the foreign body by pressure with your finger.
(4) Place your mouth over the mouth of the child, the handkerchief being in between.
(5) Next, gently blow or puff into the mouth of the child.
(6) The foreign body will very dramatically shoot across the room.

This method, I believe, is not only simple to perform but is nontraumatic to the nasal mucosa.

HOMO MEDICUS

How personal is the need of an individual in matters that affect his health. Like democracy itself, the concern of the doctor is for the welfare of the individual, a relationship that has formed the basis of medical practice through the centuries.

In this period of social expansion, our people, convinced of the necessity for adequate medical care, have extended their demands for the availability of all the benefits of modern medicine to all, as well as the other aspects of security to which we have become so closely allied, namely unemployment, sickness disability compensation, maternity benefits, hospitalization, rehabilitation and prepaid medical care. This portends the proximity of medical security in this country and all its implications.

What the community expects of the psysician is what Hippocrates demanded of his disciples: strict devotion to a regimen in which the welfare of the patient, every patient, is paramount, and unsullied service to humanity on the highest plane and in the widest scope possible.—Chas. J. Ashworth, M. D., in Rhode Island Med. J.

TUBERCULOSIS ABSTRACTS*

SPONTANEOUS PNEUMOTHORAX

Spontaneous pneumothorax has been known to physicians for many years The dramatic picture of sudden unilateral chest pain with dyspnea and the finding of a collapsed lung on physical examination and chest roentgenogram are easily recognized. Although it was once believed that all spontaneous pneumothoraces were tuberculous it has been shown that spontaneous pneumothorax may be produced by diseases such as bacterial pneumonia and may occur in apparently healthy individuals. It is important to differentiate spontaneous pneumothorax caused by tuberculosis from that occurring in the healthy, because of the differences in treatment and prognosis.

The exact frequencies of benign idiopathic spontaneous pneumothorax and tuberculous pneumothorax are difficult to determine. The former entity is often unrecognized as such and wrongly diagnosed as tuberculosis. A physician in a tuberculosis sanatorium would be likely to see more cases of tuberculous spontaneous pneumothorax, whereas one in general practice would see more cases of benign idiopathic spontaneous pneumothorax.

BENIGN SPONTANEOUS PNEUMOTHORAX

In 1943 the United States Army had 873 hospital admissions for benign idiopathic spontaneous pneumothorax. In our series the ages of the patients varied from 18 to 62 years of age with almost 50 per cent between 20 and 30 years. Males are more frequently affected, in a ratio of about five to one. Each side of the chest is equally involved. The time necessary for re-expansion of the collapsed lung varies greatly. In almost 70 per cent of the patients it was seven weeks or less.

The etiology is unknown. The patients are apparently healthy but usually underweight and never obese. A very few have a history of bronchial asthma, but none had had an asthmatic attack at the onset of the spontaneous pneumothorax. Spontaneous pneumothorax has no relation to effort but chest pain, usually described as "sharp" and "cutting," is almost always present on the affected side. Frequently the pain was pleuritic and lasted from one to four days. However, benign idiopathic spontaneous pneumothorax may be completely asymptomatic. Dyspnea was noted in 83 per cent of our patients and cyanosis was found in eight per cent.

Patients with benign idiopathic spontaneous pneumothorax do not reveal lateral pleural adhesions on the chest roentgenogram in our experience. Only four had fluid significantly above the level of the diaphragm, and in all of these cases aspiration revealed pure bloody fluid. All other patients with benign spontaneous pneumothorax had either no fluid or fluid simply filling the costophrenic angle to the level of the diaphragm. Chest roentgenogram in the benign group reveals no pulmonary infiltration either at the time of the lung collapse or later, when the lung is re-expanded.

Only 10 per cent of the patients in this group had fever, and this never lasted more than seven days. The white blood count and the sedimentation rate were normal in 70 per cent of the cases. Twenty per cent of the patients with benign idiopathic spontaneous pneumothorax have a recurrence.

TUBERCULOUS SPONTANEOUS PNEUMOTHORAX

Tuberculous spontaneous pneumothorax is usually secondary to sub-pleural caseation with erosion and rupture of the visceral pleura. Air enters the pleural space and the lung on that side collapses. Symptoms vary from none to a sharp, acute, tearing chest pain with dyspnea. Of the 35 patients with tuberculous spontaneous pneumothorax, 25 had sudden pain on the affected side. Since most of these patients were fairly ill with their pulmonary tuberculosis, their pain thresholds may have been elevated. Dyspnea was noted by 27 patients. Examination of the chest roentgen-ray revealed tuberculous infiltration of varying degree but usually far advanced. Lateral pleural adhesions were demonstrable on the chest film in 32 patients, or 91 per cent of the group. Pleural fluid was above the level of the diaphragm in 54 per cent of these patients.

Patients who develop tuberculous spontaneous pneumothorax usually are fairly ill. The sudden onset of a spontaneous pneumothorax, with or without pleural fluid, adds to the patient's respiratory embarrassment and toxemia. Prolonged fever and tachycardia are common. The pleural fluid varied from serious to purulent, and often revealed acid-fast bacilli on concentrate and culture. Of this group, one half had normal edimentation rates and one half had normal white blood counts with their tuberculous spontaneous pneumothorax. The ages of the group of 35 patients varied from 19 to 70 years. The immediate hospital mortality rate of 29 per cent was caused by both the patients pulmonary disease and his tuberculous spontaneous pneumothorax. The ultimate mortality rate cannot be stated since most of these patients were transferred to other tuberculosis sanatoria.

Treatment varied with the degree of symptoms. If dyspnea is not severe, no specific therapy is indicated. If a tension pneumothorax is present, an indwelling needle with underwater drainage reduces the increased interpleural pressure. Management of the pleural effusion varies. Patients with minimal fluid require no thoracentesis. If dyspnea and cyanosis caused by the free pleural fluid are significant, removal is advised. The patient's underlying pulmonary tuberculosis must, of course, be treated.

Benign idiopathic spontaneous pneumothorax and tuberculous spontaneous pneumothorax are two distinct entities with different causes, clinical pictures, and mortality rates. Cases of spontaneous pneumothorax must be carefully observed and the type or cause determined.—Bernard Hyde, M. D., and LeRoy Syde, M. D., Annals of Internal Medicine, December, 1950.

*Issued monthly by the National Tuberculosis Association and furnished through the courtesy of The West Virginia Tuberculosis and Health Association.

The President's Page

In recent weeks the proponents of socialized medicine have become more active. On June 22 at Bethesda, Maryland, President Truman stated that "Since 1945, I have been proposing to meet this problem by National Health Insurance. This proposal has generated a great deal of controversy. I still believe it is sound, and that the nation would be greatly strengthened by its adoption."

William Green has published an appeal to members of the American Federation of Labor for financial support in the drive for Nationalized Medicine. Mr. Ewing and others are equally as active.

The only way the medical and allied professions can permanently prevent nationalized medicine is to concentrate on medical care and medical service programs and let the results speak for themselves. Too many medical societies have laid too much stress on public relations and neglected the development and operation of adequate medical care programs.

The eye of the public is focused upon the profession and it will be necessary to do a good deal of organizing if we are to fulfil promises and substantiate the claims we have made.

Frank G. Salvaggio

President.

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FLOWERS FOR THE LIVING

A very interesting editorial concerning Dr. Joseph Lyon Miller, of Thomas, appeared in the July issue of Virginia Medical Monthly. It was presumably written by the editor of that very fine state journal, Dr. M. Pierce Rucker, of Richmond.

Except for a few months' practice at Ashland, Kentucky, Doctor Miller has been engaged in general practice at Thomas since completing a three-months internship at Sheltering Arms Hospital, Richmond, following his graduation from the University College of Medicine, Richmond, in the year 1900.

He has served as president, vice president and censor of the Barbour-Randolph-Tucker Medical Society and as vice president of the West Virginia State Medical Association.

He has always taken an active part in the civic affairs of his community, and has held the office of Mayor and has been a member of his district school board. He is medical director of the Davis Coal and Coke Company, at Thomas, as well as local surgeon for the Western Maryland Railway Company.

He has been a member of the Barbour-Randolph-Tucker Medical Society, the State Medical Association and the American Medical Association since 1907, and was elected to honorary lifetime membership in 1949.

For the benefit of Doctor Miller's hundreds of friends over the state, we are reproducing in full the editorial which appeared in the Virginia Medical Monthly:

JOSEPH L. MILLER

In bringing this series to a close, I am breaking a rule that I laid down for myself in the beginning. When some months ago I began this series of sketches in righteous indignation at the villainous attacks on doctors and their motives by Mr. Oscar Ewing in his propaganda for compulsory health insurance, I decided not to use as my subject anyone who was still alive. I had a feeling that it would be as embarrasing as, for instance, an old man telling a handsome woman to her face that she had wonderful eyes, or beautiful teeth or lovely hair. He could look at her with admiration without giving offense but to put that admiration into words might be quite another matter. So I hope Dr. Miller will forgive me for breaking my rule in his case.

Dr. Miller is a beautiful example of a general practitioner who has led a busy, useful life in an-out-of-the-way place and at the same time earned for himself a nation wide reputation on account of his work on cultural medicine. He has made no discovery that has saved the lives of millions of people, as some of my medical worthies have, nor has he opened up new fields of medicine, but he has saved his hundreds, by his own skill and knowledge and he and his like have earned the gratitude of the public by their devotion to duty in places where it is generally thought the chances for fame and fortune are slim. But is this really so? Even in my small collection of medical heroes, Jenner was a country doctor, and Koch began his epoch-making discoveries as a general practitioner. Ephraim McDowell and John Peter Mettauer were country surgeons.

Like many of the subjects of these sketches, Dr. Miller is a Virginian, born October 10, 1875, in Mason County, West Virginia, of Virginia parents. He graduated in medicine from the University College of Medicine in 1900. While a student in Richmond he began his great collection of medical books and illustrations with the purchase of Dr. James McClurg's student's notes of Thomas Young's lectures on midwifery at Edinburgh, 1769-70. Dr. Young was professor of midwifery at Edinburg and Dr. McClurg was the first president of the Medical Society of Virginia. A note on the fly leaf of the MS, in Dr. Miller's handwriting, states that he paid 25 cents for the volume and that he had it bound in Morocco by Reese David.

Upon graduation, Dr. Miller took a contract practice with a coal mining company as the quickest way to make some money to pay for his medical education. He has been in Thomas, West Virginia ever since. He has put Thomas on the map, at least in certain European circles.

The story is told in Richmond that when his oldest son married, his employer, the Holland American Steamship Lane, gave him a trip to Europe as a wedding present. On his way home, young Mr. Miller stopped off in London to get his father a present. He went to a rare book shop and picked out a volume for five pounds, and asked the dealer if he could mail it, as his luggage was all packed up. When he wrote on a card "Dr. Joseph L. Miller, Thomas, West Virginia," the dealer said "Your father has this book," and found a less expensive one that he though his father would like.

Dr. Miller, himself, told me a story on Dr. Friedenwald that illustrates the same point. It seems that Dr. Miller was in Baltimore to read a paper on some historic subject. After the meeting Dr. Friedenwald had a group around to his home. They were sitting in his rare book room and naturally talking about old medicine. Dr. Friedenwald showed an old book and remarked that he had been trying to find a portrait of the author and had a standing order with all the dealers in Europe. "I have one," said Dr. Miller, "and will be glad to send it to you when I get home." Dr. Friedenwald could not believe it until he actually got the picture. For years Italian dealers had been sending Dr. Miller a bale of pictures about once a year and Dr. Miller would take what he wanted and return the balance.

I once asked Dr. Miller if he had ever been to Europe and he replied that he never had time to get away from Thomas, West Virginia. This is not literally true for I know that he had delivered lectures on old medicine at the Mayo Clinic as well as in Omaha, Kansas City, Birmingham, Vanderbilt University, the Chirurgical Faculty of Maryland, and the College of Physicians of Philadelphia. He was Founder's Day orator at the Medical College of Virginia in 1928.

Dr. Miller signs up his assistants for three years, for he says that is long enough. If the assistant is no good he wants to get rid of him in that time and, if he is good, he does not want the boy to be "stuck" in a mining town as he was. The people of Thomas, of course, do not share this view.

Thomas, West Virginia is a dusty coal mining town of two streets. When you drive along the upper streets you can look down the chimneys of the houses facing the lower street. One of my most cherished memories is a visit I paid him shortly after he gave the most valuable part of his library to the Richmond Academy of Medicine on condition that it would build a fire proof building in which to house the books. His gift was the cause of the Academy building a home for itself.

Dr. Miller is a widower and his children have started homes of their own in more congenial climes. The doctor lives alone in a flat above the drug store. A flight of outside steps leads to his door and to the Odd Fellows Hall on the third floor. He takes his meals at the hotel next door.

Mrs. Rucker and I drove up one day in the summer, arriving in the late afternoon. The windows of his flat were covered with coal dust blackened cotton sheeting, altogether a dismal setting, but we were in for the surprise of our lives. Something on the order of an Arabian nights transformation greeted us when Dr. Miller opened his door.

The flat was furnished with beautiful old mahogany and good oil paintings and miniatures of the Miller family. Everywhere there were book cases bulging with rare books.

After supper at the hotel, Dr. Miller began to show us his treasures. At first he brought out examples of fore edge painting and beautiful bindings. Mrs. Rucker, being tired from her long drive, retired early. Dr. Miller then showed his important medical items. It seemed to me that he still had an important library after having sent his best books to the Richmond Academy of Medicine. I remember his saying that he wished he could come back after he died and hear what was said at the auction of his books.

He not only loves his books but he knows them. Many of them have a note pasted in the back to show the place the book occupied in the history of medicine or a short note about the author. Sometimes this is a clipping from the dealer's catalogues and sometimes it is a note in Dr. Miller's handwriting. In the de Fabrica of 1555, one of the books he gave the Academy, he has written a biographical note on every owner from Vesalius' time to the Richmond Academy of Medicine. This was not such a formidable task as it would appear at first glance for the owners of such a book were of necessity important personages with book plates which they had pasted inside the pigskin cover.

Thus we had a grand night and neither had any notion of going to bed until the wee small hours of the morning. Dr. Miller had developed a wonderful hobby for the evening of life. As

he sits among his books, his spirit knows no boundaries of time or space.

Jowett, in the introduction to the Dialogues of Plato, describes the philosopher as "the spectator of all time and all existence. He has the noblest gifts of natures, and makes the highest use of them. All his desires are absorbed in the love of wisdom, which is the love of truth. None of the graces of a beautiful soul are wanting in him; neither can he fear death, or think much of human life."

PROFESSIONAL CONFIDENCES

State medicine, compulsory health insurance, or any technique by which a third party becomes paymaster for professional services poses a question in medical service as to just how much of the patient's history should be divulged to the payer and what right the payer has to such knowledge. This is, to our mind, one of the most weighty arguments against compulsory governmental sickness insurance. Such information given to a governmental agency, in the very nature of things, becomes a public record, and violates individual privacy.

Our confreres to the north are wrestling with the problem. The current (August) issue of The Canadian Medical Association Journal carries an editorial on the subject which we in the states should ponder well. It is so apropos that we quote the article in its entirety:

The question of divulging professional information always arises when medical services are paid for by a third party. Whether the arrangement is compulsory or voluntary, it leads eventually to professional information regarding patients being given to someone else, either with or without the patient's formal permission.

This has presented a disturbing aspect to the profession, since it threatens one of the most vital relations between the doctor and his patient. And yet there is no question that nowadays detailed reports on patients are continually being handed to employers or to agencies of various sorts without the patient being consulted.

A recent comment on this matter has appeared in the *Saskatchewan Medical Quarterly* (April, 1951), and we feel that it deserves wide publicity. After referring to the problem of divulging professional information, the College of Physicians and Surgeons of Saskatchewan goes on to say:

"In order to make clear the physician's responsibility in respect to all these prepaid medical care plans, voluntary or compulsory, the opinion of the College Solicitor was sought. Mr. Moxon's letter is published in full and it is a very important decision.

'On October 20 you wrote about the position of a member of the College who is required to give information about his treatment of a patient to Government Departments and Boards.

'There can be no question of legal liability under the law of defamation. The occasion is "absolutely privileged" to use the lawyer's terms. No question of motive of the Doctor could arise. There is no doubt also that so far as Section 42 of the Medical Profession Act is concerned there would be no breach of the provisions of the Act—that is, it could not possibly be held to be unethical conduct since it would not be the betrayal of a professional secret.

'So far as the Department is concerned there is no professional secret in respect to the treatment over which the Department has jurisdiction. We all must realize now that the old standards are no longer applicable to present day conditions. We have become wards of the State or Province and information supplied to those who are supposed to guide our destinies and care for our welfare is in a different sphere altogether from information that might be passed around the community in earlier years. It is true that there are various employees of the Department who will see the information and report, in the course of their work but this is inevitable and so far as the Doctor is concerned there has been no publication by him to an unauthorized person. Even if the disease which is being treated by the Doctor is a "social" disease he is still entitled to and in some cases bound to report to the proper authorities. *If people want their bills paid by the State they must take the consequences and no Doctor should have the slightest hesitation in giving such details as are necessary* so that the Department in question can form the proper judgment as to whether the treatment comes within their regulations'."

DON'T SLAM THE DOOR

While no hard or fast rule can be followed in delivering a poor prognosis, the patient's interest is served best by stimulating hope and bolstering his morale, not by slamming the door in his face.

Few patients really want to be condemned despite their claims of ability to take it. The majority, unless they have become totally submissive, with loss of interest in life, will challenge a serious sentence either by resentment against the doctor or by denying its application to themselves. The physician's usefulness is thus severly limited since he has virtually denied the possibility of help from tomorrow's new developments or from other forces not readily evident. This serves no good or useful purpose.

Generally, when the outlook is poor, the patient's instinctive suspicions, the increasing limitations imposed by the progressing illness and the failure to respond to successive efforts at treatment are sufficiently meaningful and all too readily understood. Hope for the slim chance is the one thing left to the patient and he wants his doctor not to surrender or abandon him but to gain that chance for him. In these circumstances service to the patient is enhanced if a poor prognosis is not spelled out or illuminated.

As important as it is to give a prognosis when it can be good or reasonably good, is doubly important not to render an unfavorable verdict so that it will destroy morale or constitute abandonment of the patient.—Wm. S. Reveno, M. D., in Detroit Medical News.

It adds truth and dignity to everything you say if you plead guilty now and then to a slight doubt.—James R. Adams.

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GENERAL NEWS

DOCTOR - PRESS - RADIO CODE EFFECTIVE FOLLOWING NEWSPAPER COUNCIL ACT

The Doctor-Press-Radio Code of Ethics, prepared by a committee composed of Dr. E. Lyle Gage, of Bluefield, representing the West Virginia State Medical Association, and Francis P. Fisher and George Clinton, both of Parkersburg, representing, respectively, the West Virginia State Newspaper Council and the West Virginia Broadcasters' Association, was formally adopted by the State Newspaper Council at a meeting held at Spencer, July 27.

The Code had the unanimous approval of representatives of the press, radio and medical profession who attended the annual press-radio conference, sponsored by the State Medical Association, and held at Charleston, January 28, 1951. Previously, it had been approved by the Council of the State Medical Association, and it was unanimously approved by the West Virginia Broadcasters' Association at a meeting held last spring.

Code Now in Effect

The Code, as now in effect, is as follows:

Recognizing the mutual, ethical, moral, and legal responsibilities of the medical profession, the press, and the radio to the public, these groups in West Virginia do hereby establish the following code of cooperation:

Society Spokesmen

1. Designated spokesmen for the state and county medical societies will be available to representatives of the press and radio to give information promptly on health and medical subjects. When advisable, these spokesmen may be quoted by name and title and this shall not be considered a breach of the medical code of ethics.

Information Available

2. In matters of private practice, the wishes of the attending physician or surgeon will be respected regarding the use of his name or a quotation. He will give information to the press and radio where this does not jeopardize the doctor-patient relationship or violate the confidence, privacy, or legal rights of the patient (and it shall in no way be a breach of the medical code of ethics for him to do so) as follows:

(a) In cases of accident or other emergency: The nature of the injury when ascertained, degree of seriousness, and probable prognosis.

(b) In cases of illness of a personality in whom the public has a rightful interest: The general nature of the illness, its gravity, and current condition.

(c) In cases of unusual illness, injury, or treatment: The above information together with any scientific information which will lead to a better public understanding of the progress of medical science. Any physician becoming aware of such a case will notify the designated spokesman of his local medical society at once for immediate communication of appropriate information to the press and radio.

Hospital Staff Spokesmen

3. Members of the staff of each hospital will, in the absence of or at the request of the attending physician, designate official spokesmen who shall be competent to give authoritative information to the press and radio about emergency or unusual cases at any time, but this information shall not be such as to jeopardize the hospital-doctor-patient relationship or violate the confidence, privacy, or legal rights of the patient.

Editorial Judgment

4. Representatives of the press and radio recognize that the first obligation of the physician and hospital is to safeguard the life and health of the patient and they will refrain from any action or demands that might jeopardize the patient's life or health. Quotations directly or by name will be accurate in context and content and will be made only upon consent of the spokesman quoted. Editorial judgment will be used to avoid publishing any material which will exploit the patient, doctor, or hospital. In all matters concerning health or medical news, representatives of the press and radio will make all reasonable efforts to obtain authentic information from the qualified sources indicated above before proceeding to publication or broadcast.

VIVAX MALARIA FOUND IN STATE

The state department of health has been notified by the communicable disease center of the USPHS, Atlanta Georgia, to alert the practicing physicians in our state to the significant number of armed forces personnel from Korea experiencing attacks of vivax malaria.

Several cases have already been detected by the state hygienic laboratory in members of the armed forces returning from Korea to West Virginia, and there is reason to believe that the number of such cases will increase as personnel return from the Far East.

Dr. N. H. Dyer, state director of health, is authority for the statement that malaria should be suspected among patients presenting suggestive signs and symptoms, and who have been in Korea. Definite diagnosis should be based on the demonstration of malaria parasites by the state hygienic laboratory or other laboratories. Both thick and thin blood films should be prepared for examination. Thick blood films give better chances of discovering the parasites than thin ones.

If the blood findings are found positive, controversial, or uncertain, the slides should be sent to the State Hygienic Laboratory, Charleston, West Virginia, for confirmation. The laboratory will, in turn, send all positive or doubtful slides to the National Depository for Malaria Slides for further examination by nongovernmental consultants. Reports confirming positive slides or other consultative reports on the malaria slides will be sent to the state hygienic laboratory in triplicate. One copy will be kept by the director, and

the other two copies forwarded, respectively, to the submitting physician and the local health department.

Treatment with the modern antimalarials now available (chloroquine, pentaquine, chlorguanide) will alleviate the symptoms promptly. Certain cases receiving complete courses of these drugs will remain free from malaria, but others may relapse after weeks or months. Doctors are requested to inform patients of this possibility and advise them to report back to the physician if symptoms recur.

To prevent the spread of malaria from infected individuals, cases should be reported promptly to the local health department in order that insecticides may be applied to houses within a mile of parasite positive persons if malaria vectors, Anopheles quadrimaculatus or A. freeborni are known or found to be prevalent in the area.

ACCP ESSAY AWARD

The Board of Regents of the American College of Chest Physicians has again offered a cash award of $250.00 for the best original contribution, preferably by a young investigator, on any phase relating to chest disease. The prize is open to contestants in other countries as well as those residing in the United States. The award will be made at the next annual meeting of the College.

Contestants must submit five copies of the manuscript, typewritten in English, to the executive office of the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

The only means of identification of the author or authors is to be a motto or other device on the title page, and a sealed envelope bearing the same motto on the outside, but enclosing the name of the author or authors. The deadline for the submission of manuscripts is April 1, 1952.

VIRGINIA ALUMNI HONOR DOCTOR SHEPPE

Admiral M. L. Pugh, Surgeon General of the Navy, was the guest speaker at the banquet held in connection with the annual meeting of the University of Virginia Medical Alumni Association, held June 8, 1951, at the Farmington Country Club, in Charlottesville. He is a graduate of the University of Virginia, class of 1923.

The meeting consisted of a scientific session which was held at the University Hospital, in Charlottesville. The session was opened at 9:30 A. M. and continued throughout the day. It was followed by a business meeting at which Dr. William M. Sheppe, of Wheeling, was elected to the board of directors of the Medical Alumni Association for a term of four years.

Resolutions of respect to the late Dr. James R. Bloss of Huntington, were read at the meeting. Doctor Bloss, an alumnus of the University of Virginia, was for many years a member of the Medical Alumni Library committee.

In addition to Doctor Sheppe, the meeting was attended by Drs. P. A. Haley, Charleston, Arthur S. Jones, Huntington, Russell W. Roberts, Man, and William M. Sheppe, Jr., Wheeling.

RESEARCH IN ALCOHOLISM TOPIC OF SPEAKER BEFORE NEWSPAPER COUNCIL

Admiral F. E. M. Whiting, USN (RET), of New York City, president of Licensed Beverage Industries, Inc., was the guest speaker at the banquet held in connection with the summer meeting of the West Virginia Newspaper Council at Spencer, July 27. His subject was "Licensed Beverage Industry: A Study in Public Relations." He was introduced by Henry C. Woodyard, president of the Council, who served as toastmaster.

The speaker discussed the program of his organization, especially the part that is being played in the campaign against intemperance, and in support of research, and its full endorsement of the work that is being done by Alcoholics Anonymous.

Psychiatric Research

"Five years ago," he said "the industry made a grant to Cornell University to conduct research along psychiatric lines into the causes of alcoholism. Dr. Oskar Diethelm, who was in charge of this research, will shortly issue three monographs which will show that unknown matters appear in the blood under conditions of alcoholism. In other words, the psychiatrist has found that there is a biological reaction, and this has opened a field of great scientific interest.

Research Grants

"Four years ago, shortly after I became president of LBI, a grant was made in substantial amount to New York University-Bellevue Hospital to conduct research along biochemical and metabolic lines."

Admiral Whiting stated that in 1949, the Research Council on Problems of Alcohol turned over it research activities to the National Research Council, a quasi-governmental organization which has the support of leading scientists of the country. "By this action," he said, "alcoholism took its place among the scientific and medical questions that call for the full and impartial scientific resources of the country, along with the host of other fundamental problems which the National Research Council is tackling. Cancer, atomic casualties, radiation and problems of reproduction are some of these.

"The alcoholic beverage industry contributes to support administratively the Committee on Problems of Alcohol which the National Research Council set up, and this spring the board of directors made a grant to cover a period of three years for continuing research in connection with alcoholism. As a result, research projects have been or will soon be started at such leading medical schools and scientific institutions as Johns Hopkins, Columbia, University of Maryland, Purdue, Indiana University and the University of Texas."

Speaking of the treatment of alcoholism, he said that Dr. Anton J. Carlson, who at the time was head of the Research Council on Problems of Alcohol, presented a plan for model legislation and treatment at a meeting of the American Society for the Advancement of Science in Chicago in 1947. The plan was adopted by that foremost association of scientists.

New West Virginia Law

"Only last month," he said. "a new West Virginia law providing for treatment of inebriates became effective. Accordingly, the principal points of the model plan may be of more than passing interest."

Operational Principles Discussed

Three operational principles for public action were discussed by the speaker as follows:

"On the operational level the principles for public action are, first, that the center for the treatment of alcoholics should be existing general hospitals which can screen them, retaining and treating, as inpatients and in outpatients clinics, all those not requiring special institutional facilities irrespective of underlying chronic illness. It is felt that general hospitals should treat all alcoholics suffering acute physical and mental damage.

"The second operational principle is that initial treatment facilities in any public program established for the care of alcoholics should be in medical schools, university hospitals or affiliates, usually the best equipped from the point of view of staff, facilities and personnel to conduct research, treatment, rehabilitation and teaching programs. (In plain language, it is wasteful of public or private funds and not best for the alcoholic, or for research on alcoholism, to erect separate institutions for the treatment of this kind of illness.)

"The third operational principle is that mental hospital should accept, either directly or by referral from general hospitals, severe symptomatic and addictive alcoholics, and not only those who are psychotic or feeble-minded.

"The plan also includes two important organizational principles. The first is that public agencies established to cope with the medical aspects of alcoholism should be an integral part of existing state, county and city health departments.

Alcoholism PH Problem

"The second organizational principle holds that medical care of alcoholics should be transferred from the police authorities to public health agencies with custody assured for a sufficient period of time to permit effective rehabilitation. (This is a long step forward from the old idea that the alcoholic is a moral problem instead of a sick person in need of treatment.)

"Later, this model legislation was introduced in the Virginia legislature, was adopted and is now in effect in that state. Its success is attested by the fact that the law is now serving as a model for similar legislation proposed in other states."

Code of Ethics Adopted

Two important items of business were transacted at the banquet. The first was the adoption of a doctor-press-radio code of ethics, which was discussed by Francis P. Fisher, of Parkersburg, and the other was the appointment of John Jones, of Wheeling, as chairman of a committee to prepare plans for a new building to house the school of journalism at West Virginia University. The chairman was authorized to name the other members of the committee.

NEW SECRETARY FOR AM. BD. OB. AND GYN.

Dr. Robert L. Faulkner, of Cleveland. Ohio, was recently named secretary-treasurer of the American Board of Obstetrics and Gynecology to succeed the late Paul Titus, M. D., and offices of the Board have been moved from Pittsburgh to Cleveland. Communications should be addressed to 2105 Adelbert Road, Cleveland 6, Ohio.

INCIDENCE OF POLIOMYELITIS IN STATE FOLLOWS NATIONAL PATTERN

The incidence of poliomyelitis in West Virginia is following the pattern of the United States as a whole. Cases reported to date are slightly under the figure for last year, 70 in West Virginia so far and 6,843 for the nation. In 1950 West Virginia had, for the same period, 102 cases, and the U. S. figure was 7,298.

Inasmuch as the peak is reached between the first to the fifteenth of August, indications are that there will be no alarming increase this year. So far no state has reported any sizable epidemic in 1951. Judging by reports from other states, a normal case load of poliomyelitis for West Virginia, for a single year, would be between 200 and 300 cases.

According to Dr. N. H. Dyer, state director of health, health authorities recognize the fact that only 50 per cent of all poliomyelitis cases are diagnosed as such. Therefore, it is known that many undiagnosed cases are present in the state. The danger of contracting the disease while swimming is not due to the water but to the swimmer contaminating the water. A person with an unknown case of poliomyelitis, but having the "sniffles," could easily transmit the disease to other swimmers.

All current publications on the disease continue to give evidence that there is a definite relationship between the frequency of poliomyelitis to immunization during the poliomyelitis season.

Doctor Dyer has recommended that mass pre-school immunizations be delayed until October 1. The state law requiring that children entering school for the first time be immunized against diphtheria and smallpox provides that a certificate may be given by a reputable physician stating a sufficient reason why either or both of the immunizations should not be done at the time. The law further provides that the immunizations be done within the first month of the opening of school, thus allowing at least a week in October to comply with its provisions.

C. & O. SURGEONS IN ANNUAL MEETING

Dr. J. Morris Hutcheson, of Richmond, was elected president of the Association of Surgeons of the Chesapeake and Ohio Railway at the 25th annual meeting at the Greenbrier, in White Sulphur Springs, July 26-27, 1951. Dr. Richard C. Boelkins, of Grand Rapids, Michigan, was named vice president, and Mr. E. C. Mateland, of Richmond, continues as secretary.

The attendance at the meeting was one of the largest in history. More than fifty West Virginia doctors were present.

ANNUAL TB MEETING AT MORGANTOWN

The annual meeting of the West Virginia Tuberculosis and Health Association has been transferred from Parkersburg to Morgantown. Sessions will be held September 12-13 at the Hotel Morgan, in that city.

VALEDICTORY OF AUXILIARY PRESIDENT AN ACCOUNTING OF YEAR'S WORK

Mrs. Ross P. Daniel, of Beckley, who completed her term as president of the Woman's Auxiliary to the West Virginia State Medical Association on July 21, 1951, was a guest speaker with Dr. Frank J. Holroyd, of Princeton, president of the State Medical Association, at an open meeting held in connection with the annual meeting at the Greenbrier, Thursday evening, July 19.

Mrs. Daniel's address, which was in the nature of an accounting to the State Medical Association of the work of the Auxiliary during the year, is reproduced in its entirety for the benefit of the members of the State Medical Association and State Auxiliary who could not be present at the annual meeting at White Sulphur Springs. The address follows:

The time has come for me to give an accounting to you of the work during the year of the Woman's Auxiliary to the West Virginia State Medical Association. We now have 901 members, and 36 members-at-large. Three new auxiliaries were organized this year, Monongalia, Preston and Greenbrier counties, making 19 in all. Since you have 29 component societies, we must organize ten more auxiliaries to be one hundred per cent. That isn't too much to hope for, and I am confident that this will be accomplished in the not too distant future.

Our women have a clear conception of the work of the Auxiliary. Fortunately, our organization is not confused in its thinking and actions. We are not like the little colored boy who was standing in the middle of the road with a rope in his hand. He didn't know whether he'd found a rope or lost a mule. We are aware of our duties and responsibilities.

Perhaps you'd like to hear our Pledge of Loyalty: I pledge my loyalty to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation, and ever sustain its high ideals.

Pledge my loyalty: A promise or an agreement of faithfulness and allegiance.

Support its activities: Encourage and corroborate its various plans and endeavors.

Protect its reputations: Guard or shield its good name and public esteem.

Sustain its high ideals: Endure and maintain without failing a standard of perfection.

Ever mindful of this promise and pledge, coupled with the knowledge of the objects of the Woman's Auxiliary to the American Medical Association, our course is clearly charted for us, and the sailing is pleasant and safe.

When the call came in early December to circulate petitions for the establishment and maintenance of a four-year medical, dental, and nursing school as a part of West Virginia University, over 800 women answered your summons and circulated petitions from Weirton to Bluefield, from Shepherdstown to the Ohio River. We are pleased to think that our prompt and diligent work in this instance helped bring about the desired legislation.

We are still aware of the need for a broad public relations program, and were happy indeed to learn that we were to have a major role in your plans for next year. We are still alerted to the menance of "Socialized Medicine," and speak our piece at the slightest provocation.

Nurse recruitment has gained momentum in the past year. Each Auxiliary has its own plan and purpose for carrying out this program. In all auxiliaries, emphasis is placed on the prospective nurse. High school seniors are briefed on the wonderful opportunities that await those interested in this glorious profession. Many scholarships are given over the state and more are to be awarded.

Several auxiliaries provide recreational and social activities for the registered nurses in their communities. Cozy lounges and game rooms have been furnished; concert tickets, dances and skating parties are given for their entertainment. Much genuine satisfaction has emanated from this project.

Effective speakers have filled speaking engagements before lay groups all over the state. The arrangements have been made by our members, and we point with pride to the fact that Parent-Teacher's Associations, Women's Clubs, D. A. R. Chapters, Business Women's Clubs, and other professional and lay groups ask our members for speakers when making up their year books. Our speaker's roster this year carried the names of twenty-seven doctors and the state executive secretary. We are grateful to each one of you for this magnificent contribution to our program.

You are not only generous to us with your talents, but with your material possessions. May I thank you personally for the lovely programs for our convention. We are indeed grateful. I hope we merit all these special favors as tokens of your confidence, esteem, and understanding.

In closing, I would like to pay a personal tribute to the one who has been my help and inspiration this year; the one who has been willing and ready to counsel with me, so full of understanding and generous to a fault—my doctor husband!

RELOCATIONS

Dr. Edgar F. Heiskell, Jr., of Morgantown, has completed a two-year residency at the Clinic Hospital, in Wichita Falls, Texas, and has returned to active practice in his home city. He has offices there at 169 Fayette Street.

* * * *

Dr. H. Hobart Fisher, who has been engaged in general practice at Dunbar for many years, has retired and moved to Fort Lauderdale, Florida. His address there is 720 S. E. Sixth Street.

* * * *

Dr. C. S. Dorsey, of Kingston, has accepted a three-year residency in dermatology at the Mayo Clinic, in Rochester, Minnesota. His address there is 933 Tenth Street, S. E.

* * * *

Dr. Russell L. Heinlein, formerly of Sistersville, but who has been serving as industrial physician at the Atomic Energy Instillation operated by Carbide and Carbon Chemicals Corporation at Oak Ridge, Tennessee, has returned to West Virginia and will be associated in general practice with Dr. A. B. Bowyer, in Charleston. He has offices at 200 Washington Street, West.

* * * *

Dr. Lawrence B. Thrush, who recently completed a residency in surgery at Charleston General Hospital, has located at Clarksburg for the practice of his specialty. He has offices in the Prunty Building.

MLB LICENSES 47 DOCTORS

As the result of the examination conducted by the Medical Licensing Board, at Charleston, July 12, 1951, forty-seven doctors have been licensed to practice in West Virginia, fifteen by direct examination and thirty-two by reciprocity.

The following doctors were licensed by examination:

Capito, Emil, Logan
Connolly, Ira, Jr., Parkersburg
Cort, Carter F., Fairmont
Cowan, Robert C., Jr., Parkersburg
Coogle, John J., Rivesville
Crabtree, William V., Wheeling
Ferris, Jeffery, Huntington
Foley, John M., Fairmont
Gamsjager, Dorsey C., Charleston
Garrett, Charles M., Jr., Weston
Hampton, Florine K., Kermit
Martin, Harvey A., Keyser
Michael, Guy H., Jr., Parsons
Smith, Joseph A., Dunbar
Wilhite, Philip A., Jr., Charlottesville, Va.

The following is a list of doctors licensed by reciprocity:

Burns, Rowland H., Huntington
Combs, Gene N., Langley, Ky.
Crigger, William D., South Charleston
Dubin, Arthur, Berwind
Erhard, Robert F., Huntington
Gilbert, Donald R., Charleston
Hall, Thomas M., Alderson
Harshbarger, Ward, Jr., St. Albans
Hesen, John W., Silver Springs, Md.
Iseley, Clara M., Huntington
Jarrell, Charles R., Huntington
Jordan, Mary, Fairmont
Joyce, Gerald B., Welch
Krupp, Annabel B. M., Charleston
Luce, Cyril M., Jr., Upper Darby, Pa.
Marsh, Paul R., Charlottesville, Va.
McCoy, Edwin R., Elkins
Moorefield, Charles W., Killarney
Morhous, Eugene J., White Sulphur Springs
Nodurft, Joseph H., Wheeling
Parker, Joseph M., Belle
Patterson, William M., Bluefield
Persky, Murray, Beards Fork
Postlethwait, Raymond W., New Martinsville
Roberts, Lyle J., Martinsburg
Scott, Thomas G., Beckley
Stabins, Edwin P., Charleston
Stoneburner, Richard G., Beckley
Tesi, Arthur A., Yorkville, Ohio
Thomas, James R., Lewisburg
Traynham, Albert P., Sweet Springs
Woelfel, George F., Huntington

REVISED LIST OF FILM LIBRARIES

A revised list of "Sources of Motion Pictures on Health" has been prepared by the Committee on Medical Motion Pictures of the American Medical Association. This new mimeographed list includes 9 pages of addresses of the major loan and rental libraries, the state health departments' film libraries and references to printed lists and catalogs. Copies may be obtained by addressing AMA Committee on Medical Motion Pictures, 535 North Dearborn Street, Chicago 10, Illinois.

NEW TUMOR CODE

The American Cancer Society has announced the publication of a new book, "Manual of Tumor Nomenclature and Coding," in which a major attempt has been made to clarify and standardize the complicated terminology of cancer. Copies of the book will be distributed to cancer clinics and registries, hospitals, health departments, medical schools, research centers, and individual pathologists, surgeons and statisticians.

Widespread use of the new tumor code is expected inasmuch as it will be used in conjunction with the American Medical Association's "Standard Nomenclature of Diseases," and the World Health Organization's "International Statistical Classification of Diseases, Injuries and Causes of Death."

Work on the manual has been in progress since 1948 under the direction of the Amreican Cancer Society statistics committee headed by Dr. W. Thurber Fales, director of statistics, City Health Department, Baltimore, Maryland.

CRIPPLED CHILDREN SOCIETY ELECTS

Marvin G. Williams, of Bluefield, was elected president of the West Virginia Society of Crippled Children and Adults at the annual meeting held in Charleston late in July. Other officers were elected as follows:

First vice president, J. Bert Schroeder, Huntington; second vice president, J. A. French, Welch; secretary, Thorold S. Funk, Clarksburg; and treasurer, Harold Madison, Racine.

Orville W. Hawes, of Dunbar, was renamed executive director, and Andrew Blair, of Charleston, was elected a member of the state board of trustees. Mrs. Fred Watkins, also of Charleston, was reelected a member of the board.

BROADCASTS ON CONTROL OF VD

Transcriptions of broadcasts on the control of venereal diseases, which will be featured each Monday night from 10:30 to 11:00 o'clock over station WTIP, Charleston, will be made available for use on all radio stations in West Virginia.

The fourteen-week series will begin September 10, and the first fifteen minutes of each broadcast will consist of a drama in which prominent radio personalities will take part. The last fifteen minutes will include a timely talk by personnel from the state department of health, local health officers, doctors in practice in the state, county superintendents of schools and ministers. A question and answer period will conclude the program.

The final broadcast in the series will include a panel discussion with the program participants appearing.

This important series of broadcasts is made possible by the Charleston Chapter of the Council of Jewish Women in cooperation with the state department of health.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

GASTROENTEROLOGICAL ASSOCIATION TO MEET

The sixteenth annual convention and scientific sessions of the National Gastroenterological Association will be held at the Drake Hotel, in Chicago, September 17-19, 1951.

The program will include a symposium on peptic ulcer, and papers on psychosomatic medicine, diseases of the pancreas, and carcinoma will be presented at other sessions.

A new idea in commercial exhibits will be tried at this meeting. Exhibit space is being limited to those concerns which will present a scientific type of exhibit with members of their scientific research staffs present.

Immediately following the convention, the Association will sponsor a three-day course in postgraduate gastroenterology. These sessions will be held at the Drake Hotel, September 20-22, and will be under the direction of Dr. O. H. Wangensteen, of Minneapolis, and Dr. I. Snapper, of New York City.

Full information concerning the program and the postgraduate course may be obtained by addressing communications to the Secretary, National Gastroenterological Association, 1819 Broadway, New York 23, New York.

MLB TO MEET OCT. 1-3

The next regular meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, October 1-3, 1951, for the purpose of examining applicants for license to practice in West Virginia.

MARYLAND GP ACADEMY TO MEET

The third assembly of the Maryland Academy of General Practice will be held at the Lord Baltimore Hotel, in Baltimore, October 4, 1951. The meeting, which is scheduled to be opened at 9:30 A.M., will continue throughout the day and close with a banquet at 6:00 o'clock.

Speakers include Dr. William Gordon Lennox, associate professor of neurology, Harvard Medical School; Dr. Wallace M. Yater, of Washington, D. C.; Dr. Sidney A. Portis, associate clinical professor of medicine, University of Illinois College of Medicine; Dr. Lloyd F. Craver, associate professor of clinical medicine, Cornell University Medical College; Dr. Robert B. Greenblatt, department of endocrinology, Medical College of Georgia, Augusta; Dr. John C. Krantz, Jr., professor and head of the department of pharmacology, Maryland University School of Medicine, Baltimore; and Dr. Lewis K. Ferguson, professor of surgery, University of Pennsylvania School of Medicine.

The banquet speaker will be Dr. Irvine McQuarrie, professor and head of the department of pediatrics at the University of Minnesota School of Medicine. His topic will be, "The Causes and Therapeutic Management of Spontaneous Hypoglycemia."

A cordial invitation has been extended to West Virginia doctors to attend the meeting, and further information may be obtained by writing to Dr. Nathan E. Needle, 2314 W. North Avenue, Baltimore.

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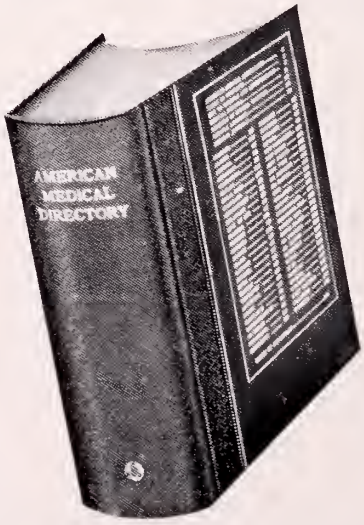

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Boone	W. V. Wilkerson	Highcool	Ray I. Frame	Madison	2nd Wed.
Brooke	Ralph McGraw	Follansbee	W. T. Booher	Wellsburg	
Cabell	L. B. Gang	Huntington	James A. Heckman	Huntington	2nd Thurs.
Central West Virginia	Worth B. Forman	Buckhannon	Theresa O. Snaith	Weston	Quarterly
Doddridge	R. S. White	West Union	A. Poole	West Union	
Eastern Panhandle	E. Andrew Zepp	Martinsburg	G. O. Martin	Martinsburg	Quarterly
Foyette	M. G. Hresan	Fayetteville	Thos. C. Sims	Fayetteville	2nd Tues.
Greenbrier Valley	R. M. Ferrell	Lewisburg	H. Chas. Ballou	White Sulphur Spgs.	2nd Wed.
Hancock	R. E. Flood	Cove Sta., Weirton	Eli Weller	Weirton	2nd Tues.
Harrison	R. T. Humphries	Clarksburg	L. D. Zinn	Clarksburg	1st Thurs.
Kanawha	Vernon L. Peterson	Chorleston	Robert C. Bock	Charleston	2nd Tues.
Logan	Frank R. Jamison	Logan	A. M. French	Logan	2nd Wed.
Marion	J. D. Romino	Fairmont	Geo. T. Evans	Fairmont	Last Tues.
Marsholl	Don S. Benson	Moundsville	David L. Ealy	Moundsville	Semi-Ann.
Mason	(Vacancy)		C. Leonard Brown	Pt. Pleasant	
McDowell	R. O. Gale	Welch	R. E. Burger	Welch	2nd Wed.
Mercer	R. H. Fowlkes	Bluefield	Robt. S. Gatherum	Bluefield	3rd Mon.
Mingo	S. G. Zondo	Williamson	E. T. Drake	Williamson	2nd Thurs.
Monongalia	Clark K. Sleeth	Morgantown	Maynard Pride	Morgantown	1st Tues.
Ohio	Charles D. Hershey	Wheeling	John M. Moore	Wheeling	4th Tues.
Parkersburg Academy	Charles L. Goodhond	Parkersburg	S. W. Goff	Parkersburg	1st Wed.
Potomac Valley	M. H. Maxwell	Moorefield	G. E. Hartle	Moorefield	2nd Wed.
Preston	DelRoy R. Dovis	Kingwood	C. Y. Moser	Kingwood	1st Thurs.
Raleigh	Hugh S. Edwards	Beckley	Poul E. Vaughan	Beckley	3rd Tues.
Summers	W. L. Van Sant	Hinton	D. W. Ritter	Hinton	
Taylor	Herbert N. Shanes	Grafton	C. A. Haislip	Grafton	Last Thurs.
Wetzel	T. B. Gordon	New Martinsville	Terrell Coffield	New Martinsville	Monthly
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ANNUAL REPORTS*

CHILD WELFARE

The principal objectives of the Committee on Child Welfare for the year are as follows:

1. Improved care of the newborn:

It is felt that the present neonatal mortality in West Virginia might be appreciably lowered by more adequate facilities for care and greater attention to the problems of overstimulation and overfeeding of both full-term and premature infants.

It is hoped that hospitals will as rapidly as possible make such changes as may be necessary to make sure that our newborn nurseries conform to the standards set up by the West Virginia Hospital Licensing Law.

Physicians handling obstetrical cases are urged to take the opportunity during prenatal visits to educate and encourage mothers to breast feed their infants.

It is recommended that each component society have one program during the year devoted to the care of the newborn infant.

2. The development of an accident prevention program:

Accidents are responsible for approximately eleven thousand deaths annually in the one to fourteen years age group. Four of every ten accidents occur in the home and many are directly or indirectly preventable. Physicians are urged to accept responsibility for education in conferences with parents and in the acceptance of invitations to speak before organizations on the subject of accident prevention.

3. The liberalization of the Crippled Child Law of the State of West Virginia:

In the opinion of the members of the committee, a crippled child should be defined as a physically handicapped child, disabled by a chronic condition, amenable to improvement or cure by appropriate care, treatment or rehabilitation.

Respectfully submitted,

Theresa O. Snaith, M. D.,
Chairman
Russell C. Bond, M. D.
Henrietta L. Marquis, M. D.
Raymond M. Sloan, M. D.
Carl E. Johnson, M. D.
Harlow R. Connell, M. D.
A. A. Shawkey, M. D.
Marcus E. Farrell, M. D.

REVISION OF CONSTITUTION AND BY-LAWS

The House of Delegates of the West Virginia State Medical Association, at the annual meeting held at White Sulphur Springs in 1950, directed the Committee on Revision of Constitution and By-Laws to study the matter of an overall revision for the purpose of ironing out conflicts in the various articles and chapters and deleting unnecessary and obsolete sections. This committee completed its work early in the spring of 1951. Some changes in the constitution and several changes in the by-laws were agreed upon unanimously. The proposed amendments were printed in full in the May, 1951, issue of the West Virginia Medical Journal.

The more important amendments which this committee offers to the constitution and by-laws are as follows:

Constitution

Art. V, Sec. 1, line 4. The President, the two Vice Presidents, and the Treasurer are included as members of the House of Delegates.

Art. VI, Sec. 1, line 5. Change the section to provide that a majority of the membership of the Council shall constitute a quorum. At the present five councillors constitute a quorum.

By-Laws

Chap. I, Sec. 1. Change the section to require payment of state dues and current assessments and license to practice medicine in West Virginia as a prerequisite to membership in the State Medical Association.

Chap. I, Sec. 5, line 4. Raise the minimum age for election to honorary membership from sixty-five (65) to seventy (70) years, and require membership for fifteen (15) years prior to the seventieth birthday instead of the sixty-fifth birthday.

Chap. IV, Sec. 1, line 3. The name of "Scientific Work Committee" is changed to "Program Committee."

Chap. IV, Sec. 2. Change the section so as to provide for election of one additional delegate and alternate "for every twenty-five (25) members or fraction thereof." The present by-laws provide for an additional delegate and alternate for every twenty-five (25) members or fraction thereof above ten members.

Chap. VIII, Sec. 2, paragraph 3. The provision that the members of the Committee on Syphilis shall serve staggered terms is eliminated.

Chap. VIII, Sec. 2, paragraph 4. The provision for the appointment of the chairmen of the committees on Child Welfare and Maternal Welfare is eliminated, and these committees are directed to select their own chairmen.

Chap. X, Sec. 1. Require resolutions offered at the first session of the House of Delegates to lie on the table for one day.

Practically all of the other amendments which are offered by the committee are more or less consequential in character, correcting spelling, improving construction, and eliminating conflicts between the constitution and the by-laws.

The committee has not undertaken to write into the constitution and by-laws any radical changes, but has endeavored to comply strictly with instructions from the House of Delegates to iron out conflicts and delete obsolete and unnecessary provisions to meet conditions which have changed since the last revision.

*Submitted at the annual meeting of the House of Delegates at White Sulphur Springs, July 19-20, 1951.

DPA ADVISORY

The DPA Advisory Committee desires to submit, as part of its annual report, a letter dated July 17, 1951, addressed to the chairman of the committee by Mr. Robert F. Roth, director of the Department of Public Assistance, and we desire particularly to call attention to the recommendations made therein. The letter follows:

West Virginia
State Department of Public Assistance

Robert F. Roth
Director

July 17, 1951

Hugh A. Bailey, M. D., Chairman
Advisory Committee to the Department of Public Assistance
West Virginia State Medical Association
Atlas Building
Charleston, West Virginia

Dear Dr. Bailey:

During the conference of July 15, 1951 between your Committee and representatives of the Department of Public Assistance, I called attention of the Committee to what I believe to be a growing and insidious danger in the field of medicine as related to the West Virginia program of public assistance. My remarks were specifically confined to the operation of the departmental program known as aid to dependent children which is officially known as the third category of the state-federal public assistance program.

In this particular program, the state and federal government plan for the keep and general welfare of children under eighteen years of age who have lost either or both parents by death or any other occurrence such as desertion, physical incapacity, etc. The humane purpose of the program is not being questioned, but in the belief that dangerous trends were developing in the procedures and most particularly in the establishment of eligibility of the recipients for the public cash grants, I deemed it necessary to call to your attention the part that the medical profession is playing in the program in the way of direct establishment of eligibility through certification by the local doctors in the various communities throughout the state.

In any home where the father is dead and the mother is left without visible means of support for her children, may I repeat that no question is being raised as to eligibility after due evidence that there are no resources which can apply and that the need of the family is apparent. On the other hand, where fathers are living and also residing in the home, and are ambulatory and apparently in good physical condition except for some physical or mental defect for which a certification has been obtained that the individual is unable to perform full-time work, I raised the question as to whether the state is being imposed upon because of the lack of proper machinery and procedures by which such fathers could be and should be restored to gainful employment and to the normal functions of the father in the home in the way of keep and accommodation. This, in addition to the present process of informing the individual of his condition, guidance in the direction of rehabilitation, and referral to proper sources of treatment.

From a study made in 1948, the fact remains that the trend with which we are concerned and bringing to the attention of the medical profession at this time, is the ever increasing number of fathers in the home and the gradual drift toward what seems to be the idea that a total living can be obtained from the state and government through an arrangement whereby physical incapacity need only be establishsd to gain that end. Such a trend cannot grow and spread without great harm to our traditional American way of life and, in the writer's opinion, it is a direct slant at socialism and surely it raises the question as to whether we are recognizing a growing evil but doing little or nothing toward curing it. Naturally, we turn to our staff and we do attempt to devise and put into effect stringent policies to avoid as nearly as possible all so-called "chiseling."

On the other hand, regardless of all of our policies, all of our instructions, and the training of our field workers, none of us can challenge the certification by a licensed physician that an applicant is incapacitated for full-time employment. It is not the purpose of this communication to direct an open challenge to any of our practicing physicians as to their integrity and honesty of purpose, but we do feel that we have a right to discuss the situation with you and with them in the belief that it may be possible through a better understanding to develop better procedures with the result that accurate evaluation of the physical and mental condition of the client may be reflected through the objective findings of the physician. Such a program will necessarily require close cooperation between the agency and the medical profession and it is for that purpose and to the end that that may be achieved that this communication is directed for the attention and consideration of your Committee and the State Medical Association.

The Department has recognized and will continue to recognize the right of clients to the call and services of the physician of their own choosing insofar as the ordinary illnesses of the family and the individual are concerned, but it is felt that in such situations as the establishment of eligibility for these public funds on the basis of physical incapacity the Department should have and enjoy the same right, for example, as the insurance companies, Workmen's Compensation, and many of the large industrial concerns. That is, to direct the applicant to a certain appointed and accepted physician or commission of physicians for a review of the case and final determination in the matter of total physical incapacity or even partial incapacity that it may be estimated and the case subject to review and further and final consideration.

During our conference, your committee expressed its desire to recommend boards or commissions of three physicians to make findings, and it is my sincere hope that the State Medical Association will give favorable consideration to such a recommendation subject, of course, to further study, final draft, and final approval.

The irreducible minimum, of course, is the family of a widow by death, divorce or desertion, totally without means of support. May I repeat there is no question being raised about them.

In submitting this proposition, may I say it is being done in the belief that our doctors, once they understand these problems as we see them, will cooperate in the same fine manner as in all of the other branches of our program for the good of their own profession while at the same time doing a fine job of direct benefit to the people of West Virginia.

With our best wishes,

Sincerely yours,

(Signed) Robert F. Roth,
Director

Relief officials, we are advised, are worried because there are at the present time over 49,000 children and 27,000 adults on the relief rolls of the Department of Public Assistance, the total being approximately 75,000 people. It is entirely possible that many of the recipients of relief are not entitled to be on the rolls. Part of the fault finding might lie with the members of the medical profession. After a doctor certifies that a particular person is incapacitated, the DPA has no recourse whatsoever, and that person is placed on relief.

After consultation with Mr. Roth, the director of public assistance, and Dr. Harold H. Kuhn, chief of the division of medical services, your committee suggests that the director of public assistance, the medical director, or some other official zone the state, so that we might have a committee of doctors, preferably composed of three members, appointed to serve in each county. This committee would screen applicants for relief on the grounds of illness or incapacity to work. The responsibility for making the decision would be placed in these committees, and we feel that an honest effort would be made to determine whether or not applicants should be placed on relief.

Your committee recommends that, at the discretion of the director of the DPA, a three-man committee be set up in each county in West Virginia to determine the eligibility of applicants for relief on the grounds of illness or incapacity to perform labor.

Respectfully submitted,

Hugh A. Bailey, M. D.,
Chairman.

(Ed: Immediately after the reading of this report, Dr. Hugh A. Bailey, chairman of the DPA Advisory Committee, moved that the House of Delegates recommend that the committees described in the report be appointed. The motion, seconded by Dr. Charles L. Goodhand, of Parkersburg, was put to a vote and unanimously carried.)

* * * *

EXECUTIVE SECRETARY

The past year has been one of unusual activity for many of the committees of the West Virginia State Medical Association. The matter of the establishment of a four-year school of medicine, dentistry and nursing in West Virginia, backed solidly by the State Medical Association, has required unusual efforts on the legislative front. The eventual success of this program is due in large measure to the activities of the Fact Finding and Legislative Committee, the Public Relations Committee, the council, component Medical Societies, the Women's Auxiliary, and the "Committee of 55."

The "grass-roots" nature of the project was such as to enlist the support of members of the medical profession in every section of West Virginia. Long before the legislature convened, it was a foregone conclusion that support for the school would be forthcoming from many of the members when the proper time arrived during the course of the bills through the legislature.

Full Support for Four-Year School

No legislative group within the Association ever functioned to better advantage than the Fact Finding and Legislative Committee, headed by Dr. Thomas G. Reed, of Charleston.

With the full support of the president, Dr. Frank J. Holroyd, the chairman of the Council, Dr. Charles E. Watkins, and the co-chairmen of the Public Relations Committee, Dr. John F. McCuskey and Dr. Paul L. McCuskey, it was possible to obtain support from the very beginning among professional and lay people throughout the state.

A very important part of the program was the circulation of petitions, and this project was carried out with marked success by the Auxiliary PR Committee, headed by Mrs. Ben W. Bird, of Princeton.

No small part of the work was done on the homefront. Component society secretaries and the members of the "Committee of 55" deserve much praise for the manner in which they kept in touch with members of the Senate and House of Delegates throughout the session.

Governor Okey L. Patteson never wavered in his determination to obtain action at the 1951 session on the bill creating the four-year school, as well as the bill providing for a tax on soft drinks to finance the construction and maintenance of the institution.

When it became apparent that the bill could not be passed unless concessions were made, Governor Patteson very promptly agreed to assume the responsibility for naming the site for the school with the understanding that the tax bill was to be passed to provide proper revenue.

The fight in the legislature was for the most part friendly during the session. Very few of the members actually opposed the establishment of the school. Many were on the firing line for the school from the time the bills were introduced.

We doubt if any project ever before undertaken by the State Medical Association had as many members actively interested and working as was the case in the fight for the four-year school.

Increased Attendance at Society Meetings

It has been my very great pleasure to visit nearly all of the societies and auxiliaries since the last meeting of the House of Delegates. Attendance at these meetings has been improving steadily, and interest in the societies themselves has been maintained for the most part by providing scientific programs of unusual interest.

Several joint meetings between the societies and auxiliaries have been held with success, and some of our groups have held joint meetings with the members of the dental and nursing professions.

Auxiliary Interest at High Pitch

Interest in the work of the Auxiliary has been kept at a high pitch through the leadership provided by the president. Mrs. Ross P. Daniel. She and the chairmen of standing and special committees have done meritorious work in the fight against socialized medicine and in the campaign for the four-year school.

Nearly all of the societies now have dinner meetings, and most of the auxiliaries luncheon meetings. There is no doubt that this is a factor in the increase in attendance at meetings.

State Still in Second Place

While the campaign for the adoption by local, district and state organizations of resolutions opposing compulsory health insurance slowed down consider-

ably with the close of the year, such resolutions are still being adopted by groups in this state. It is a source of great pride to all that West Virginia still stands second among the states in the adoption of such resolutions.

Community Health Councils

It is now indicated that the establishment of community health councils over the state will be one of the principal projects of the PR Committee for the ensuing year.

Membership Totals

There has been a slight loss in our total membership since the annual meeting at White Sulphur Springs in 1950. At that time the membership totaled 1424, which was an all-time high. Today the total is 1401, a loss of 23 members.

Of this total, 150 hold honorary lifetime membership, which is an all-time high. This means that we have 1251 dues-paying members on our roster.

During the year, we have sustained a loss of 29 members by death, and 55 have relocated in other states. A total of 84 new members have been elected since the annual meeting in 1950. This equals the combined loss by death and relocation. It is therefore evident that 23 doctors who were members in 1950 permitted their membership to lapse by reason of nonpayment of dues.

Membership by Societies

The membership by component societies as of July 15, 1951, is as follows:

Society	Members
Barbour-Randolph-Tucker	45
Boone	15
Brooke	6
Cabell	159
Central West Virginia	54
Doddridge	2
Eastern Panhandle	29
Fayette	42
Greenbrier Valley	29
Hancock	19
Harrison	85
Kanawha	248
Logan	36
Marion	62
Marshall	16
Mason	5
McDowell	56
Mercer	62
Mingo	29
Monongalia	51
Ohio	109
Parkersburg Academy	90
Potomac Valley	29
Preston	17
Raleigh	63
Summers	10
Taylor	9
Wetzel	12
Wyoming	12
Total	1401

AMA Dues for 1951

Of the 1951 dues-paying members of our Association, 92.3 per cent have also paid AMA dues for 1951.

Society and Auxiliary Reports

With the cooperation of the local secretaries of societies and auxiliaries, it has been possible to have almost one hundred per cent coverage for the Journal of meetings held during the past twelve months. Several scientific papers presented before local societies have been submitted to the publication committee as the result of the active cooperation of secretaries of component societies.

State and Local Officers Lend Aid

Only a few of our societies have treasurers whose duties concern only the collection and remittance of dues. In the other societies, all finances are handled by the secretaries. It has undoubtedly been a burden to these loyal and efficient officers to be charged with responsibility for the collection of AMA dues in addition to state and local dues of members, and they have my sincere thanks for answering promptly the many letters that have had to be written to them, not only concerning dues, but with reference to the many problems that have had to be solved during the year.

The officers of the State Medical Association and the members of the Council have had unusual burdens. Meetings have been unusually long, but the volume of business transacted has justified the time that has been spent in the consideration of matters that affect all of the members of the profession.

The president, Dr. Frank J. Holroyd, has made himself available at all times, and he, as well as all of the other officers and members of the Council, have responded to every call that has been made upon them for aid in the voluminous work of the Association during the past several months.

Considerably more members of the Association are visiting the headquarters offices than at any time in the past. It is our hope that these visits will continue, and this is an invitation to the membership generally to continue to call at the headquarters offices whenever possible.

Sincerely,
Charles Lively,
Executive Secretary.

Charleston,
July 15, 1951.

* * * *

HOSPITAL RELATIONS

Nothing has been brought to the attention of the committee during the year that would indicate any difficulty in hospital and physician relationships. There has been no apparent desire on the part of any person to test the ruling made last year by the attorney general at the request of the previous hospital relations committee concerning "hospitals practicing medicine." It is entirely possible that there is no need for legal action, as the ruling itself may have caused hospitals and physicians to solve the problems that existed between them.

Your committee addressed a letter to each component society asking that a local hospital relations committee be set up in order to discuss and, if possible resolve any difficulties that might arise at the local level. We requested replies to this communication and received a total of seven, indicating that four societies either had established or were establishing such committees and three societies apparently could see no need for the same.

This committee is willing to keep itself available to do what it can in bettering relations between hospitals and physicians, and to aid in settling any problems that might arise.

Respectfully submitted,
Upshur Higginbotham, M. D.,
Chairman
Cecil O. Post, M. D.
Ross P. Daniel, M. D.

* * * *

INDUSTRIAL HEALTH

The Committee on Industrial Health has received from Dr. Carl Peterson, Secretary of the Council on Industrial Health of the American Medical Association, an outline briefly setting forth the activities of that Council and including committee plans of organization activities as set forth at the last conference of the Council held May 25, 1951.

With this outline, your Committee on Industrial Health respectfully suggests that the West Virginia State Medical Association approve the following program for development of local industrial health services.

Committee Activities

1. Public Relations.—Working with the various non-professional groups to establish and improve labor-management-medical relationships.

2. Professional Relations.—Working with professional groups toward the goal of integrating the thinking and activities of the several groups whose major interest is in the field of industrial health and hygiene (i. e. physicians, nurses, industrial hygienists, engineers, chemists and toxicologists.)

3. Special Committee Activities.—Separate committees work to further the study and development of workmen's compensation, education and scientific development, rehabilitation, and establishment of standards. As situations arise other committees are activated to study specific problems or to develop programs.

State and County Committee Organizations

1. Objectives and procedures:

(a) The state committees should submit its stated objectives and procedures to the House of Delegates of the State Association for endorsement. Then the committee speaks for the State Medical Association and has real power and influence.

(b) Each county medical society council should also receive a list of the state committee's objectives and procedures.

2. Establishment of County Committees.

(a) Members of the state committee make request to appear before the governing body of the county society to inform them of the need for and the value of a county committee on industrial health. In areas where this approach has been used the state representative has been enthusiastically received and the results have been gratifying.

(b) The county society chairmen should be members of the executive board or board of trustees of the county society.

(c) Make the county committee chairmen members of the state committee which ties the various groups in and gives chance for closer working contacts between the state and county committees.

Education

(a) Industrial health conferences.—May be an evening meeting or one- or two-day sessions. Various combinations of the following organizations can act as co-sponsors: State medical association, state or local department of health, medical and public health schools, industrial nursing organizations, state association of industrial physicians, management councils, chamber of commerce, labor organizations, and industrial hygiene association.

(b) Sponsor the introduction of industrial medical subjects into the curricula of the medical schools on an undergraduate and graduate level.

(c) Work with industry in the development of plant tours in which the medical society members go through the plant, have lunch or dinner at the plant, followed by a short scientific program embracing subjects relative to industrial medical practice. Similar tours can be arranged for medical students.

(d) Work with program committees of the state and county medical societies in arranging for the introduction of subjects and papers on industrial medicine.

(e) Sub-committee on research to keep track of research projects in progress throughout the state.

(f) Develop speakers bureau so that qualified and willing volunteers will be available to talk on various general and special subjects relative to industrial medicine.

(g) Work with the Academy of General Practice on national, state and local levels toward the development of an educational program that will bring an awareness of the basic essentials of industrial medical practice to its membership.

(h) Development of clinics on various subjects (i. e. evaluation of permanent and partial disability. Members of the meeting rate the hypothetical cases, and notes are compared. Wide variations may be found. Possible result, a standard rating schedule can be developed and accepted by the medical society).

(i) Regional meetings of one day duration inviting only those known to have an interest in industrial medicine. Such topics as the migrant worker and his problems of tuberculosis, syphilis, obstetrical and child welfare, sanitation and nutrition can be discussed, or possibly some currently popular subjects, such as manpower conservation or civil defense. It is important to "go outside" for speakers and don't repeat the subject matter. Funds for this type of meeting can be obtained

from public health departments, medical societies, industrial and agricultural organizations.

(j) Conduct training courses for nurses interested in industrial nursing.

(k) Publish a bulletin for industry giving information regarding the purposes and advantages of a well developed industrial health service.

(l) Work with state and local health councils and interest them in industrial health and hygiene problems in the area. A survey of existing industrial health services now available and of what they consist in a particular community or area would be a valuable project.

Standards

(a) Require that a physician serving industry be a member of his county medical society.

(b) Encourage reporting of industrial diseases.

(c) Meeting problems of adequate medical supervision of industrial nursing by developing guiding principles for medical service in industry which can act as a guide for industry, nurse and doctor. Clarify the use and abuse of "standing orders" as they relate to the ethics of nursing and medical practice. Appoint an industrial nurse to the state or county committee as a consultant to advise in this and other problems involving the nursing profession.

(d) Develop list of qualified physicians who are interested in industrial practice.

(e) Consider the problem of renumeration for industrial physicians.

Workmen's Compensation

(a) Develop program for education of physicians regarding the state workmen's compensation law and their responsibilities to these laws and regulations.

(b) Foster better working relations and understanding between physicians, lawyers and industrial commissions.

Legislation

(a) Appoint a subcommittee on legislation to act as a "watch-dog" for trends in legislative thought and action.

(b) In accordance with this part of the program we advise that this committee coordinate its activities with the Bureau of Industrial Hygiene and the committee selected as an advisory committee on rules and regulations pertaining to industrial health. This advisory committee which has been selected is composed of representatives from industry, labor, medical profession and safety organizations. Of the fifteen members of this committee, there are three physicians, Drs. J. J. Brandabur, C. & O. Railway, Huntington, W. Va., Dr. E. G. Riley, Area Medical Administrator, United Mine Workers of America, Charleston, W. Va., and Dr. Joseph T. Noe, Medical Director, East Liverpool, (Ohio) Pottery Association.

Labor

(a) Recognize the fact that labor is desirous of seeing industrial services improve and expand, and get busy in this direction. It is important to note that in cetrain areas labor is already developing its own health and diagnostic services.

(b) Appoint a subcommittee to meet regularly with the heads of the union committees in charge of health programs.

Improvement of Communications Between Council and Committees

(a) State committees should submit a copy of their annual report to the Council.

(b) State committees should give interim reports of their activities to the Council.

(c) The council News Letter should act as a clearing house for committee activities that have national interest or appreciation.

Plans for Future Meetings

(a) An annual joint meeting of the Council and the Chairmen of the State Committees on Industrial Health is to be held on the afternoon of the day preceding the Congress on Industrial Health.

(b) Each year at the close of the joint meeting, a chairman is to be elected by the group for the ensuing year. He will meet with the Council at its regular fall meeting and will assist the Council staff in the development of a program for the next annual joint meeting.

Respectfully submitted,
A. J. Villani, M. D.,
Chairman
Robert C. Lawson, M. D.
H. M. Brown, M. D.
Donald R. Roberts, M. D.
H. M. Beddow, M. D.

(Ed: Following the reading of this report in the House of Delegates, the program as outlined by the committee on Industrial Health was, on motion of the chairman, Dr. A. J. Villani, unanimously approved.)

* * * *

NECROLOGY

The following is a list of West Virginia doctors whose deaths during the past year have been reported to the West Virginia State Medical Association:

1950

June 28 ..... Ona F. Mitchell, Franklin
July 30 ..... George W. Fox, Ansted
Aug. 6 ..... Holly L. Casto, Spencer
Sept. 1 ..... Elmer Graves Kessler, Williamsburg
Sept. 8 ..... Paris Leonard Gray, Elkins
Sept. 10 ..... George William Speed, Mullens
Sept. 26 ..... Owen Poling, Eskdale
Oct. 7 ..... Isaac Taylor Peters, Princeton
Oct. 14 ..... William West McFarland, Berkeley Springs
Nov. 4 ..... Clifton D. Kraft, Parkersburg
Nov. 4 ..... James Owen Williams, Alderson
Nov. 11 ..... Walton S. Shepherd, Charleston
Nov. 13 ..... Alexander M. Carr, Lewisburg
Nov. 21 ..... Benjamin F. Bone, Moundsville
Nov. 27 ..... Robert Jeffrey Reed, Wheeling
Dec. 21 ..... Morgan T. Morrison, Sutton
Dec. 31 ..... Ernest Fred Gott, Charleston

1951

Jan. 20 ..... Beverly L. Noe, Newton
Jan. 23 ..... Harry Hood Esker, Clarksburg

Feb. 3 ..... Theodore Kensell Oates, Martinsburg
Feb. 10 ..... Earl Bennette Henson, Charleston
Feb. 10 ..... Elbert Logan Wright, Parkersburg
Feb. 11 ..... Mark Duty Good, Charleston
Feb. 13 ..... Arias Palmer Gibson, Huntington
Feb. 18 ..... John Edward Offner, Fairmont
Feb. 27 ..... Leonidas R. Harless, Gauley Bridge
Mar. 1 ..... Benjamin Franklin Brugh, Clearwater, Fla. (Formerly or Montgomery)
Mar. 8 ..... Albert Lester Amick, Charleston
Mar. 15 ..... John Wylie Pyles, New Martinsville
Mar. 22 ..... Claude Samuel Lawson, Fairmont
Mar. 24 ..... Clifton Johnson Reynolds, Bluefield
Mar. 29 ..... John Bruner Rosier, Clarksburg
Apr. 21 ..... James Ramsdell Bloss, Huntington
May 12 ..... Calvin Franklin Jackson, Bradshaw
May 18 ..... Frederick Arthur Fitch, Huntington
June 11 ..... George Washington Simmons, Ripley
July 6 ..... W. J. Judy, East Rainelle

Respectfully submitted,

Don S. Benson, M. D., *Chairman*
George T. Evans, M. D.
W. M. Warman, M. D.
Logan W. Hovis, M. D.
J. H. Wolverton, Jr., M. D.

* * * *

SYPHILIS

The downward trend in the number of reported cases of syphilis as shown in the 1950 report of the Syphilis Committee has continued. This is shown conclusively by the following figures:

	Total No. Cases Reported	No. Patients Treated at Rapid Treatment Center
July 1949—May 1950	3474	1927
July 1950—May 1951	2300	1310

This apparent decrease in the incidence of the disease will have the effect of placing the burden of control of syphilis on local communities, with the family physician assuming a greater share of the responsibility.

Congenital Syphilis

One phase in the control of venereal disease continued to be a problem. This is the relatively high incidence of congenital syphilis. The testing of bloods of prenatal cases, and the adequate treatment of all positive cases could eliminate this entirely. However, during the past year 30 per cent of all prenatals in the state were not given a blood test. It is thought that from the known number of infected mothers, there will be about 150 unknown cases of congenital syphilis which will not be discovered until a disability arises.

Prophylactic Treatment

A new phase in the control of syphilis has recently been instituted by the state department of health. This involves the treatment of all contacts of infectious cases of syphilis. Prophylactic treatment is recommended because of the fact that 60 per cent of all contacts are

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known to develop syphilis, and that prophylactic treatment, before the onset of symptoms, is thought to be 100 per cent effective.

It is possible that the state department of health may be in a position to furnish to the family physician the necessary drugs for prophylactic treatment of contacts of infectious cases.

Recommendation has been made that mass blood testing in high incidence areas of the state be done. It is felt that this should not be done until an effective screening test be perfected which would not entail too great an expenditure of public funds, and which would be technically feasible.

Better Reporting Needed

It is known that a large number of syphilis cases are not being reported to the health department. This could be improved by better reporting from the profession or by reporting of all positive specimens by the private and hospital laboratory personnel in the state. If reporting continues to lag, there will occur a false decrease in the reported incidence of syphilis.

	No. Positive Serologic Syphilis Tests
Jan. 1949—Dec. 1949	16,583
Jan. 1950—Dec. 1950	14,602

Since Federal funds are allocated to the states according to the magnitude of the problem, this will result in a further cut in funds. As a consequence venereal disease would remain a major public health problem, but funds would not be available to control the disease.

Funds Needed for Laboratory Diagnosis

The need of adequate funds for laboratory diagnosis of the venereal diseases is becoming quite acute. Federal funds for this purpose have been reduced, and it is likely that there will be still further reductions in the future. Obtaining state funds for this vital service will become a necessity within the next year or two.

It is a known fact that, before the widespread use of penicillin for the treatment of syphilis, a rather small percentage of syphilis patients received adequate treatment. It would be wise to evaluate these individuals and when indicated treat them with penicillin.

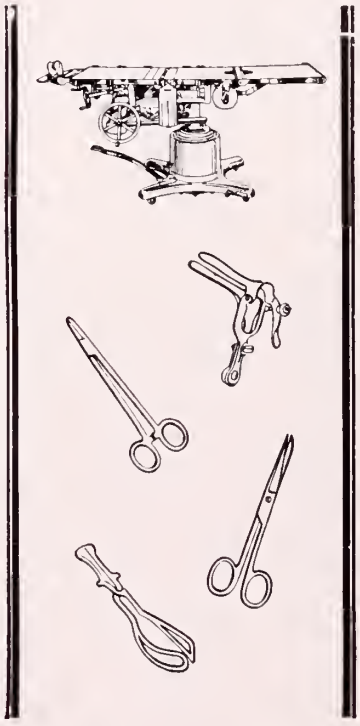
Recommendations

Your committee recommends that the need for prenatal blood tests, preferably during pregnancy, be re-emphasized, and that all positive cases be followed and treated;

That the State Medical Association urge more complete reporting of syphilis cases and contacts by physicians to the state department of health, and that private laboratories be required to submit copies of all positive serologic tests for syphilis to the state hygienic laboratory;

That the medical profession support efforts to obtain state funds for serology work in the state hygienic laboratory in order that this valuable service will not be lost to the people and physicians of West Virginia;

That individuals who were inadequately treated with arsenicals and bismuth before penicillin be contacted



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and evaluated, and that they be treated if necessary to avoid future disablity; and,

That the medical profession cooperate with the department of health in providing prophylactic treatments for all contacts of infectious syphilis.

Respectfully submitted,

N. H. Dyer, M. D., *Chairman*
Thomas B. Baer, M. D.
R. O. Halloran, M. D.
A. U. Tieche, M. D.
W. Carroll Boggs. M. D.

* * * *

TUBERCULOSIS

All the members of the Tuberculosis Committee were contacted either by letter or telephone during the month of January, 1951, before the general meeting of chairmen of committees in Charleston.

At a meeting of the committee, held April 22 in Charleston, Mr. A. E. Rhudy, director of the bureau of tuberculosis control of the state health department, reported that all of the committee recommendations had been acted upon favorably at the 1951 session of the legislature.

Outpatient Pneumothorax Refills

We recommended in 1950 that a sufficient appropriation be sought at the 1951 session of the legislature to cover the cost of necessary pneumothorax refills, and that the expenditures of such funds be supervised by the bureau of tuberculosis control.

The sum of $25,000 per annum was appropriated by the 1951 legislature for use in payment of outpatient pneumothorax for the medically indigent.

The committee went on record as unanimously recommending early and regular reports in re all cases receiving pneumothorax refills under the state aid fund, such report to be sent to the bureau of tuberculosis control.

Increase in Grants

There has been an increase in D. P. A. grants for the families of tuberculosis patients. In some cases the increase has been as much as 65 per cent.

The sum of five thousand dollars has been recommended for the treatment of needy children at Hillcrest, in Charleston.

Our recommendation that the appropriation for medicines for the various sanitoriums was favorably acted upon and the amount available has been substantially increased.

Waiting List at Pinecrest

As of this date (July 19), forty male patients are on the waiting list at Pinecrest.

The construction of additional quarters at Hopemont, now underway, will relieve to some extent the overcrowded condition at Pinecrest.

Mass Chest Survey

In the mass survey in 1950, at least 20,000 more x-rays of the chest were taken than during 1949. We

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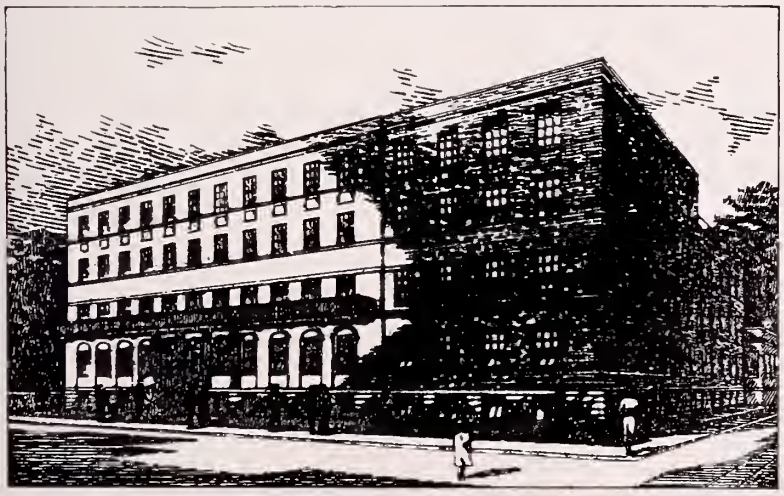

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hope and expect this number to be increased in 1951. Mass surveys are useless unless the facilities are present for follow-up work. There are still many counties in West Virginia which do not have diagnostic clinics.

The mass survey is merely the start in the control of tuberculosis and must be followed up by adequate diagnostic clinics and sufficient sanatoria beds to isolate the cases with positive tuberculosis. This state lags both in the number of diagnostic clinics and in beds available for treatment.

Treatment by General Practitioner

We hope to encourage the diagnosis and treatment of pulmonary tuberculosis by the general practitioner. We are trying to arrange one program on pulmonary tuberculosis each year in each component medical society. A number of our West Virginia specialists in the treatment of tuberculosis have volunteered for this service and three local medical societies have already had a program devoted to the subject. Doctors who have already appeared before local societies include V. L. Kelly, William L. Cooke, J. N. Reeves, M. L. White, Walter E. Vest, George F. Evans and Hugh S. Edwards.

Use of BCG

There has been some discussion as to the use of BCG in the treatment of tuberculosis, especially in our insane institutions. Tuberculosis patients at Spencer are kept segregated until they can be taken to Weston, and the three hundred beds in the wards at that institution are always occupied.

Dr. H. C. Huntley, of the state health department, has been requested to obtain further information concerning the possibility of the use of BCG at Spencer.

Some of the members of the tuberculosis committee advocate chest x-rays of all patients as they are admitted to general hospitals. This would be routine to the same extent as urinalysis or blood tests for syphilis. We believe this would constitute a long step forward if arrangements could be made to finance such tests.

Respectfully submitted,

W. P. Bittinger, M. D.,
Chairman
V. L. Kelly, M. D.
William L. Cooke, M. D.
J. N. Reeves, M. D.
George F. Evans, M. D.
Hugh S. Edwards, M. D.

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THE PROBLEMS FACING AMERICAN MEDICINE IN THE IMMEDIATE FUTURE*

By JOHN W. CLINE, M. D.,†
San Francisco, Cal.

I would like to address my remarks to "Your A. M. A." I do this because I feel that the A. M. A. is *your* A. M. A. You know of its composition as a federation of autonomous state associations, but many physicians throughout the country, do not know a great deal about it. To them, the American Medical Association is too apt to be a distant, impersonal organization in Chicago which represents the medical profession on a national plane, but its many and varied activities and its real purpose are not well understood by too large a portion of our profession.

In one sense the American Medical Association is a hundred forty odd thousand doctors. Every member is as much a part of the American Medical Association as is another. It is organized on the lines of a republic and its officers are chosen by democratic processes. Its policies are determined by the House of Delegates which is made up of members elected by the state and territorial associations and by the scientific sections augmented by a few designated by the government services.

The purposes of the American Medical Association are, briefly, to advance the science of medicine, to continuously improve the quality of medical care, to make that care more easily available to those who need it, to maintain and elevate the standards of medical education, and to promote the legitimate interests of the medical profession. More recently, the Association has assumed a new role and that is to furnish leadership in the effort to stop the progress of the United States down the road to socialism. In order to fulfill the primary objectives of the Association, it is engaged in many activities.

Some months ago, I spent five days at A. M. A. headquarters in Chicago and went through the building from top to bottom. I visited not only the heads of departments but many of the people holding lesser positions in the organization. I was impressed by the sincerity of these people and the enthusiasm with which they were doing their work. I had been familiar with the activities of the A. M. A. for some years but had not realized, except in a vague way, how extensive they were.

Neither had I realized the degree to which the A. M. A. is a tremendous public service organization. In certain ways it is directly serving the public; in others, it is serving the public indirectly through the physicians who are its members.

AMA COUNCILS

The Council on Medical Education and Hospitals has been responsible in part for the great improvement in medical education in this country in the past forty or fifty years. It, likewise, has been instrumental in standardization of resident training programs.

The Council on Scientific Assembly arranges the scientific programs for the annual session and the interim session. These programs provide great educational opportunities, as do the exhibits. They also furnish the major supply of articles in the Journal of the American Medical

*Presented before the 84th Annual Meeting of the West Virginia State Medical Association at White Sulphur Springs, July 20, 1951.

†President of the American Medical Association.

Association, which is the most widely read medical journal in the world.

In addition to the Journal of the A. M. A. nine specialty journals and Today's Health are published. The specialty journals contain educational material of great interest to those in specialized fields and Today's Health, which is the successor to Hygeia, is a valuable medium of health education for the public.

The Bureau of Health Education, in addition to putting out Today's Health, also arranges for television and radio programs, transcriptions, books, pamphlets and other material designed to educate the public in matters of health.

The Council on Medical Service, which has seven subcommittees, is working continuously to extend the various aspects of medical care so that the public may benefit. It deals with prepaid medical care plans and many other items in extension of medical care.

The Council on Industrial Medicine works closely with other organizations interested in elimination of the hazards of industry and dealing with the medical problems which arise in industry. It arranges periodic industrial health congresses.

The Committee on Rural Health holds annual meetings in different parts of the country to which all people who are interested in the problems of rural health are invited. The discussions are carried on in informal fashion. I have read extremely enthusiastic accounts by leaders of farm organizations such as the Farm Bureau Federation and The Grange and other lay persons representing various interests in the field of rural health. This committee has been responsible for plans which have resulted in placing physicians in rural communities.

The Council on Pharmacy and Chemistry examines and tests pharmaceuticals submitted to it for purity, chemical composition, effectiveness, toxic hazards and accuracy of advertising claims. It works closely with the Food and Drug Administration. In certain instances, the work of this council has been responsible for elimination of grave health hazards involved in new medications.

The Council on Physical Medicine and Rehabilitation performs a similar service with reference to physical appliances. The seal of approval of either of these councils gives the physician and the lay person added assurance concerning the safety and efficacy of various products available for use in disease.

The Bureau of Investigation is continuously investigating the claims of new and startling methods of treatment. It maintains extensive files on most of the principal medical frauds and quack remedies which have been presented to the public. The information it has accumulated has resulted in the termination of many fraudulent claims made for medications and methods of treatment.

There are other activities of the American Medical Association which are constructive and helpful in extending and improving medical care. The net result of all these activities has been to contribute importantly to the progressive improvement of medical care over the course of time.

MEDICINE MUST REMAIN FREE

In order to maintain the standards of medical care and progressively improve them, it is essential that American Medicine remain a free profession. No country ever has enjoyed medical care of equal quality and availability. History teaches us that wherever socialized medicine is brought into being, the medical care of the particular country deteriorates; the medical profession no longer is free and no longer has the incentive to work continuously toward improvement of medical care.

When we were confronted by the threat to the freedom of American Medicine resulting from the reelection of Mr. Truman in 1948, it became necessary to take certain steps to protect the medical welfare of the public. Mr. Truman had disregarded the platform of the Democratic Party and had campaigned on a personal platform promising everything to everyone, including socialized medicine. His reelection was heralded by the proponents of compulsory health insurance and by many supposedly impartial commentators and columnists as indicating that socialized medicine would soon be imposed upon the people of this country. The House of Delegates of the American Medical Association accepted the challenge in St. Louis in December, 1948, issued a statement of principles, directed that a campaign be instituted, and levied an assessment of twenty-five dollars with which to implement the campaign. The National Education Campaign of the A. M. A. shortly thereafter became a reality.

The results of this campaign have been extremely heartening. By and large over the country, the members of the A. M. A. have participated with interest and vigor. Most state and county organizations have responded well. In both instances, however, too large a load has

been carried by too small a number. The participation of every individual physician in the country is essential for complete success of the campaign.

COOPERATION OF PRESS

As a result of the campaign, large segments of the public have become aware of the hazards of socialized medicine. Over 90 per cent of the newspapers of the country are editorially on record as being opposed to it. More than 10,000 organizations of national, state and local scope are on record against compulsory health insurance. The members of Congress have become conscious of the many pitfalls of such a program.

One of the great weaknesses of the medical professions in most countries where socialized medicine has come into being has been that they have had no substitute for it. The costs of medical care in this country, while greatly exaggerated, are high. No one is more aware of that fact than are those who deal with illness daily. The costs of total medical care have risen less than the cost of living, and the only important item which has risen more than the cost of living is the per diem rate of hospitalization. But, serious illness can strike with crushing force upon the individual or family so afflicted.

PHYSICIANS DUAL OBLIGATION

For many years we have recognized that the physician has a dual obligation to his patient: to render the best possible medical care to him, and to treat him fairly in an economic sense. If one extends this thinking to the medical profession and the public, he realizes that mechanisms for supplying medical care on a basis which can easily be afforded by the bulk of the population are necessary. It may be that we have no greater moral obligation to do this than have those who supply essential services to the public in other fields. Enlightened self interest, however, dictates that we so do.

Perhaps no greater example of the wisdom of such a course could be found than in the experience of California. Recognizing some of the problems involved in distribution of medical care, certain groups were attempting to find an answer in the early and middle 1930's. The ideas which were developed during that time furnished the basis for California Physicians' Service when it was established by action of the House of Delegates of the California Medical Association in December, 1938. I believe that some plan would have been established shortly under any circumstances, but the election of Governor Olson on a platform including socialized medicine precipitated action at that time.

The great value of California Physicians' Service, even when it was in the blue print form, was apparent. Most of our legislators are intelligent, sound individuals who recognize the weaknesses of socialized medicine but they also face political pressure from their constituents. Many used the prospect of California Physicians' Service as an evidence of the intention of the physicians to apply themselves to the problem of distribution of medical care and on that basis were willing to oppose such legislation. The development of C. P. S. thereafter was slow.

In 1945, when Governor Warren made his first proposal for socialized medicine, California Physicians' Service was, as he described it, a miserable thing of 100,000. Those of you who were engaged in practice at that time will recall the bitter fight in the Legislature in 1945. Thereafter, the California Medical Association undertook a program to expand voluntary health insurance of all types. As nearly as could be determined, about two million people in that state were covered by some variety of health insurance at the time.

The development of the voluntary health insurance movement has been tremendous since then. The growth between 1945 and 1947 was sufficient that Governor Warren's second proposal was easily beaten. The growth between 1947 and 1949 was such that, with the full power and prestige of the Governor's office, he could not muster even a respectable minority in the senate to support his proposal.

As is always the case whenever a positive program is pursued vigorously, there were criticisms of the activities of the California Medical Association and its program. As president of the Association in 1947-1948, I felt it incumbent upon me to ascertain from impartial sources the actual effectiveness of our program. Had it been as successful as many of us who were involved in it believed or had we been deluding ourselves?

I asked Mr. Ben H. Read to supply me with the names of the members of the Senate and Assembly who had been most helpful in defeating the proposals for socialized medicine in the 1945 and 1947 legislatures, and the names of other members of the "Third House" who had been of greatest assistance to him. I believe he gave me the names of eight members of the legislature and nine legislative representatives. I wrote to all, and the letters were in the form of questionnaires. Some of the replies dealt specifically with the questions posed, while others disregarded

the questions and answered as they saw fit. Some answered in a few paragraphs; others took several pages of single-spaced typewritten discussion to express themselves.

The one uniformly salient feature of their replies was that had we not had California Physicians' Service and had we not engaged in the vigorous promotion of voluntary health insurance, the Legislature would have enacted socialized medicine. While C. P. S. was small and of itself offered only a minor portion of the answer to the extension of medical care, it had tremendous moral value. The fact that the physicians of that state were committed to a program of development of voluntary health insurance effectively stopped those proposals.

In the early days, California Physicians' Service offered so much more than did the insurance companies that whenever it came into competition with them on straight medical coverage, it almost invariably won out. The only way in which the insurance companies could successfully compete was by offering a package containing disability, group life and perhaps certain other insurance coverage. As time has gone on, that situation has changed materially. The contracts of the private insurance companies have become so much more liberal and their premiums comparatively so much smaller that California Physicians' Service now competes with considerably difficulty for straight medical coverage with the insurance groups. The same may be said of the Blue Cross plans.

At any rate, the widespread coverage in California has destroyed any important demand for socialized medicine. It has not been proposed in serious form in the present legislature.

VOLUNTARY HEALTH INSURANCE

These facts were so sufficiently apparent that the National Education Campaign was designed to accomplish three things. First, to educate the people of this country concerning the disadvantages of socialized medicine; second, to obtain endorsements of our position by lay groups; and third, to develop extensive voluntary insurance. The progress toward all three objectives has been satisfactory. The most striking progress probably has been in the development of voluntary health insurance.

At the present time, there are over 72 million people covered by some form of voluntary health insurance. The Blue Cross numbers over 40 million, and the Blue Shield and medically sponsored plans have enrolled about 20 million people.

Much more remains to be done. Not only must the numerical growth of the voluntary health insurance programs be continued but they must be improved in quality and scope. I have been told that nowhere in the country, except in some of the Blue Shield plans do the voluntary health insurance organizations offer as extensive coverage at as reasonable rates as they do in California. We must continuously look toward improvement of the various types of coverage available to the people.

It is important that the people of West Virginia and the people of the United States have an opportunity to choose between various types of coverage. The needs of some are better suited by one type than another. We believe in free enterprise and we believe that competition is healthy. Competition and the different design of the various plans ultimately will evolve the best coverage to suit the needs of the people.

The greatest catastrophe which I can envision for organized medicine would be the failure of one of its major medically sponsored plans or sufficiently great change in a plan as to indicate that it was a failure. At this critical time such would be a tremendous blow to the whole national program.

The American Medical Association, in spite of its constructive activities, has been subjected to the most vicious and systematic campaign of vilification that any self-respecting body operating in the public interest has ever been called upon to counteract. It will take a long time and much effort to offset the results of the libelous propaganda of certain organizations and certain agencies of government.

PR AND THE INDIVIDUAL PHYSICIAN

I am certain that an ever increasing number of the physicians of this country understand the problems which confront the profession. There is great need for improvement of the public relations of medicine at every level. There are certain things which the American Medical Association can do and is attempting to do. There are other things which the state associations can do and many of them are conscientiously undertaking them. The great burden of public relations, however, falls upon the county society and the individual physician.

Various surveys have shown that the most damaging aspects of the practice of medicine in a public relation sense are usually real or fancied overcharges, lack of availability of medical care, and to a lesser degree, other deficiencies.

AMA CODE OF ETHICS

The code of ethics of the American Medical Association is substantially the code of the gentleman as applied to the practice of medicine. The vast majority of our members would not violate the code even if it did not exist because they are gentlemen and they respond in their human relationships with gentlemanly conduct. The code is there for the guidance of physicians and for measuring their conduct.

The good deeds of a hundred physicians may be offset by the bad deeds of a single member. When a physician deviates from the code of ethics, that fact must be called to his attention. If he does not mend his ways we must have the mechanism for dealing with him. The mere presence of such facilities, however, is not enough. Committees on professional relations or grievance committees, by whatever name called, must be fair, courageous and vigorous. They must investigate thoroughly any allegations against members of the profession, judge the evidence impartially, and then take whatever action is indicated. In the majority of cases, it probably will be found that the grievance against the physician is trivial or imaginary. On the other hand, when real violations occur the medical profession must exclude from its organizations a member whose ethics and standards do not comport with those of the profession.

PUBLIC MUST BE TOLD

One thing further is needed and that is that the public be adequately informed of the existence of and the means of access to such a committee. Probably no other action could do more to increase the confidence of the public in the profession. If the public be thoroughly convinced that it will receive fair treatment at the hands of the profession for wrongs it may have sustained, there will be far less criticism of Medicine.

PRESS RELATIONS

Another matter of considerable importance which must be handled at the county level is that of press relations. It has been my experience that practically all publishers, editors and reporters are honest men who desire to paint accurate word pictures for their readers. In order to maintain their newspapers they must furnish the public with news. They deserve our cooperation in every way in which we can give it. If we learn to know them on a friendly basis and supply them with the information they need, many difficulties can be resolved. They are occasionally victims of misinformation and, therefore, arrive at faulty conclusions. A quiet friendly discussion with them will do more to overcome this situation than the most vehement argument. Usually, the facts can be demonstrated and the result will be a material change in attitude. Certain county societies hold periodic meetings with members of the press for this reason.

Intimate knowledge of the functions of the American Medical Association and explanation of these activities to lay people and those associated with the press will do much to correct some false impressions which exist concerning the American Medical Association. The A. M. A. story is that of constructive public service. If every doctor will tell the story in every place he may be, it will do tremendous good for American Medicine.

It is advisable for physicians to demonstrate their good citizenship by participation in public activities. The influence of the physician in personal contact and in small groups is great, particularly in the field of health and medical care problems. He can assist his local and state government materially by participating in these activities. While he is a physician, he also is a citizen and one who is interested in good government. By making his influence felt in other than the purely health and medical care fields, he can accomplish a great deal.

THE DOCTOR AND POLITICS

During the past few years, the physicians of this country have been more active politically than previously. The American Medical Association, and the various state and county societies have not participated in politics. This has been done by individual physicians and by informal committees of physicians working with other people. Some of the groups who have worked with physicians represent fields of activity which are closely allied to medicine, but many more represent purely lay groups. Medical men have furnished leadership in political campaigns in many parts of the country. As a result of the activities of physicians and those of people of like mind in opposing further extension of socialism, there has been a material improvement in Congress. It can be stated with reasonable assurance that there is little or no hazard of the enactment of socialized medicine in the 82nd Congress.

The medical profession has become recognized as a political force. It is extremely important that any group which has political power should not abuse that power. It must be used in the interest of good government and not for selfish purposes.

The quickest way to destroy political influence is to use it for improper purposes.

BATTLE HALF WON

The battle against socialized medicine is about half won. Certain leaders in the Administration are as determined as ever to force socialized medicine upon the people of this country whether they wish it or not. The annual report of the Federal Security Agency just issued indicates the determination of Mr. Oscar Ewing in this regard. I quote from page 16, paragraph 3 of this report:

"Social insurance against the costs of medical care is essential if we are to achieve comprehensive social security and if the benefits of modern medicine are to be available to everyone.

"Private health insurance has achieved considerable coverage in recent years, but it cannot effectively meet the needs of all the people.

"Publicly subsidized private insurance would be costly, complicated, and only partially effective. Government health insurance administered on a decentralized basis as part of a national contributory social insurance system offers the most adequate and economical method of guaranteeing that there will be no financial barriers to needed medical care."

LABOR AND SOCIALIZED MEDICINE

The objectives for this year must be to push the positive program of elimination of various sources of annoyance to the public which exist in the practice of medicine, striving for increased volume and quality of voluntary insurance and an effort to convince the one large segment of the public with which we have made little headway in our campaign to explain the disadvantages of socialized medicine. I refer to the large labor organizations.

There are adequate surveys which show that the average union man is opposed to socialized medicine. A recent survey showed roughly 45 per cent opposed, 28 per cent in favor of, and 27 per cent without opinion with reference to the adoption by this country of a system similar to that in England.

Certain labor leaders already have come out against socialized medicine, and most notable among these are Mr. William Hutchison, the president of the Carpenter's Union, and Mr. Dave Beck, executive vice president of the Teamster's Union. Certain locals here and there throughout the country have expressed their opposition and there is indication that certain state organizations may take a stand against such a program. However, the highest officers of both the A. F. of L. and the C. I. O. are steadfast in their advocacy of compulsory health insurance.

The only reasonable approach to solution of the problem is by stimulation of an ever increasing number of individuals, local unions and officers to oppose the program of the top level policy makers.

More and more it is becoming apparent to people active in the labor movement that the socialization of medicine would spell the ultimate socialization of labor. Even if this hazard were not present, it can be demonstrated that the result of socialized medicine would be poorer medical care at higher cost. I, therefore, urge upon all of you that you make the effort to convince the elements of labor in your own communities of the facts as opposed to the distorted versions provided to them from other sources.

Again I say, the battle is half won. The tide is running strongly in our favor. If we, the physicians of America, will do the job we should do in the succeeding two years, I believe that the major portion of our problems will have been solved. In a changing world, however, as soon as one problem has been solved, another seems to present itself. We shall, therefore, have to recognize that we must maintain a continuous effort to preserve the freedom of medicine because only through the preservation of this freedom can we provide the quality of medical care which the people of this country deserve.

BASIC RULES FOR GUIDANCE OF THE AGED

No house is big enough to hold two families. Therefore the aged are best off in their own home. But if infirmity necessitates removal into the home of a relative, then the room assigned to them should be furnished as far as possible with things from the old home: a picture, a favorite chair or desk, as ties with past. This room is their palace, never to be entered save with their permission. Never should a couple be separated.

The aged should be encouraged to continue their old friendships and to form new ones. They should be stimulated to go to church, club, or lodge and to observe anniversaries and significant occasions.

They should receive some spending money, preferably as a reward for duties performed or under some scheme that would suggest it was due them, such as a loan on which high interest is paid.

They should be given the chance to be useful in the household. The young so often fail to appreciate how much the sense of uselessness plagues the aged, and so, finding it easier to do something themselves than to wait for the oldster to do it, they rob the latter of this bit of satisfaction.

The aged should be encouraged to be neat in dress and personal appearance.

Above all, they should be shown affection. They are happiest in the knowledge that they are loved and welcome.—Richard A. Kerns, M. D., in GP.

CYSTS OF THE PERIPHERAL RETINA IN RELATIONSHIP TO DETACHMENTS

By H. M. KATZIN, M. D.,†
New York, N. Y.

The subject of retinal detachment has come up for study recurrently since the first use of ophthalmoscopy. There was no effective method of treatment until Gonin demonstrated that the closure of retinal tears could cure a large proportion of cases. There have been many theories as to the etiology of retinal detachments, but modern thought, I believe, centers about the two most likely predisposing factors as the formation of holes in the retina and the traction effects of vitreous bands. Cysts in the retina are, of course, intimately associated with the formation of holes. Since the cysts and holes that result in detachments are almost exclusively in the peripheral retina, our study has been devoted to this region.

It has long been known that observation of the peripheral retina is much more effectively done by indirect ophthalmoscopy, but with the development of the electric ophthalmoscope less use has been made of this method except by some of the older men and by the European trained opthalmologists. Recently, however, a new emphasis has been placed on indirect opthalmoscopy, popularized by Schepens. A method has been worked out for mobile binocular indirect opthalmoscopy. Schepens' reports have appeared in the literature to the effect that there are often a considerable number of holes and tears in the peripheral retina in patients with detachments. Since the method of indirect ophthalmoscopy does not offer very high magnification, we decided to take so-called normal human eyes which were obtained by The Eye Bank after death and examine them under higher magnification. This procedure will give a base-line, so to speak, as to the occurrence of lesions in the peripheral retina that resembles holes in otherwise normal eyes.

Our method was adapted from Troncoso. A Poser slit lamp was used and the culottes were placed in a transparent chamber fixed in position so that the gross anatomy could be localized by the slit lamp. The lesions were then marked for histologic section. (Routine paraffin sections were made through the thickness of each lesion that was noted for study).

The ora serrata can be seen as the jagged line between the retina and the pars plana of the ciliary body. The teeth of the ora usually are more marked or taller on the nasal side. On the temporal side they are either quite short or form an irregular wavy line. The teeth correspond in position to the intervals between the ciliary processes. Among our 170 specimens we have seen seven eyes which have unusually flat teeth on the nasal side in addition to a flat ora on the temporal side. On occasion, tall teeth are also observed on the temporal side. In five instances, the teeth have been so long that they have been connected with ciliary processes. On rare occasions, teeth may become disinserted and may drop off partially or completely. The partially disinserted end may drop off and hang down as a tail or it may shrink to form granular or spherical tips. In one of our cases it appeared to be completely disinserted including with it a basal area which was quite large. The ora retracted leaving a large cleft between the ora and the pars plana and produced a mild anterior dialysis of the retina.

The outstanding change noted in the periphery of the retina is peripheral cystic degeneration. This is very definitely related to the age of the patient. It is difficult to examine the ora of babies' eyes by our method. In most instances, Lange's fold obscures the region of the ora serrata. When no fold is present, an irregular line of what appears to be rarefaction similar to cystoid degeneration can be seen, but on microscopic section this can be made out to be due to the fact that the layers of the retina are very irregularly arranged at this age. In our collection of 13 premature babies' eyes we found no peripheral cystic degeneration. In a series of 40 babies' eyes in which three slides were available for each eye, only one case in a child of 21 months had definite cystoid degeneration. We are aware that in recent literature reports of several authors including Occhi, Lauber, Kolmer and Klemens have noted this retinal change, but in our experience it is rare.

In our collection of 170 eyes examined by the slit lamp method, we found that peripheral cystic degeneration did not begin to develop significantly until the 4th decade and the severe forms of it increase very definitely with increasing age.

The ten year span between 40-50 years marks the important period. It should be noted at this point that adhesions between the vitreous and the retina at the ora serrata become more firmly established at this age. This material will be published elsewhere.

It should also be noted that the temporal side in which the development of the eyeball causes a greater evening-out of the teeth of the ora serrata is the site of greater cystic change. There is no significant difference between the upper and lower hemispheres.

Presented before the West Virginio Acodemy of Ophtholmology ond Otoloryngology ot White Sulphur Springs, April 27, 1951.
†Work done under the ouspices of the Eye Bonk for Sight Restorotion, Inc., 210 E. 64th St., New York City.

MORPHOLOGY OF CYSTOID DEGENERATION

Due to the transparency of the retina, cystoid changes are difficult to see in the living eye, but after the retina becomes opaque due to fixative, the degenerated areas remain transparent and can easily be differentiated. Degenerated areas are found along the margin of the retina and on the teeth of the ora, beginning as an oval spore or, through confluence, appear dendritically branched. As degeneration becomes more extensive, patches form which may be continuous. On the nasal side, areas are more marked in the teeth and on the sloping sides and spread into the root of the teeth. On the temporal side there usually is an irregular continuous band. Patches may be microscopic in size or as large as 8 x 12 mm. (2-3 mm. behind the equator.)

On occasion very large cysts may develop, and out of our collection 10 eyes were in this category. One was 8 x 4 mm. in diameter. Large cysts may be solitary or they may result from the confluence of several cysts. The inner and outer walls of these large cysts consist of the inner and outer limiting membranes of the retina. These layers are quite tough and the bulging occurs into the vitreous. Three of the 10 were on the nasal side and seven were on the temporal side. Out of these 10 cases, holes were found in two, both on the external wall.

THE MECHANISM OF PERIPHERAL CYSTIC DEGENERATION

This mechanism is one upon which a considerable amount of speculation has been expended. In the past, such factors as age, disturbance of circulation, shrinkage of cells, motility and lymph stasis all have been advanced as etiologic factors. The original description by Iwanoff assumed that this change was edema of the retina due to degenerative change of the capillaries. We have stained some of these eyes by the Hotchkiss method and did not find any significant pathologic change in the capillaries. However, the blood supply in this region is less rich and it may very well be disturbed by the motility of accommodation. Several authors including Kuhnt, Landberg and Oguchi considered that the cystoid change was due to the shrinkage of cells. Occhi disagreed. He suggested a theory of motility and lymph stasis. From our observations we believe that the motility of accommodation probably is the major factor. Because of the anatomy of the ciliary muscle and the fibers of the zonula, the retina is pulled forward with the choroid during accommodation. At the same time the orbiculoposterior capsule fibers of the zonula are relaxed so that during accommodations opposing forces exist in the peripheral retina. The spores and cavities of cystoid degeneration develop along the teeth of the ora in the direction of pull of the zonular fibers. A third factor in strengthening our opinion is the influence of age. Cystoid degeneration does not develop until the patient is old enough to accommodate and becomes most marked when the retina becomes adherent to the vitreous after the age of 40.

In summary then, cystoid degeneration occurs in the periphery of the retina where accommodation has its greatest effect and the blood supply of the retina is the poorest. Motility causes an increase in Muller's fibers while the nervous elements degenerate. Once fluid accumulates in the cystoid space, changes in osmotic pressure may cause further distention.

PART II

In the course of our observations there was another, quite distinct form of retinal cyst noted. This cyst arose from a kind of cellular proliferation of epithelial cells which resemble the nonpigmented epithelium of the ciliary body. They seemed to evolve in a very definite pattern. First, granular patches were noted in the retina, then floaters were seen arising from those patches, then holes were formed at the site of the origin of the floaters. In 101 patients representing 167 eyes, 38 patients representing 49 eyes had this form of change.

In fixed preparations of the retina, granular patches appear dry, greyish and opaque. They vary in size from a few miera to 0.5 x 2.5 mm. The longer axis is arranged meridionally to the eyeball and they are usually oval in shape. The floaters appear very similar to the granular patches. It can be shown that the floater separates gradually from the retina and is set free into the vitreous. Floaters are rounded and bud-like, they may be composed of one or more clusters, and cystoid spaces are present in the center of the floater. They are oriented toward the anterior aspect of the eye, appear to be attached to fibers similar to zonular fibers and follow the direction of these fibers.

Hole formation results from the separation from the retina of the proliferated cell masses which usually separate *en masse*. A hole results from the release of a floater which involves the whole thickness of the retina. When only the inner layers are involved, perforation is incomplete. During the process of hole formation the floater may partially cover the hole as an operculum.

Often, and this is very important from a clinical point of view, it is impossible to determine whether perforation is complete, even with the help of the slitlamp. Only by microscopic study can one be sure.

On histologic study the retinal lesions consist of small masses of proliferated cells which appear mostly in the inner layers of the retina but sometimes extend to the outer layers. This type of change has been described by previous authors, notably by Vogt and by Samuels. They regarded the proliferated cells as glial in origin. We believe from rather extensive observation, that the characteristics of these cells is that of the nonpigmented epithelium of the ciliary body. There is no cell layer of the retina overlying these granular patches, although there may be a thin lining membrane which probably is the interlining membrane. The granular patches usually are adherent to the adjoining vitreous. This is easily seen in histologic preparations, although it very difficult to demonstrate photographically. The retinal tissue underlying and surrounding the proliferated cellular masses usually is degenerated and perforation occurs when the degeneration involves the entire thickness of the retina.

The reason for the presence of these cells in the retina is not clear. We find that granular patches are much more commonly found on the nasal side of the retina where there are many irregular folds during embryonal development. The possibility suggests itself that they might be cell rests. (We have one seven year old child's eye with a cellular floater and a vitreous fiber attachment to the original site.) Another possibility is that of a redundant fold of ciliary epithelium overlying retina where the teeth of the ora serrata are most highly developed. Occasionally pigmented cells are observed in the lesions. These are not of inflammatory origin.

From our observations, we have learned that it is very difficult to differentiate small cysts of the pars plana, dilated cysts due to peripheral cystic degeneration and small degenerated areas of the retina from real holes in the retina, even with the help of the slit lamp. Therefore we believe that in clinical ophthalmoscopic examination it would be even more difficult. Small granular patches usually are located in the periphery of the nasal side of the retina, and they can be observed by indirect ophthalmoscopy only if the magnification is great enough. If the retina is already weakened due to degeneration or other cause and local adhesions exist, particularly in the presence of liquefaction of the vitreous, relatively little movement may precipitate hole formation.

In summary, then:

1. A kind of cellular proliferation resembling nonpigmented epithelium in the periphery of the retina has been observed in 49 out of 167 eyes, or 38 persons out of 101 (reported as normal eyes).
2. At these areas of the retina there are usually formations of local adhesions between the retina and the vitreous fibrils adherent to epithelial cells.
3. There usually is cystoid degeneration and atrophy of the retina below and around the mass of epithelial proliferation. This varies in degree.
4. A tendency to separation of the proliferated cells *en masse* has been observed. The result is the formation of a floater into the vitreous.
5. Hole formation occurs when there is separation of the mass. Three cases were observed with operculated holes and two with complete holes. Where the dehiscence involves the entire thickness, a round or oval hole forms due to the gliosis of the margin on a thin or degenerated area of the retina. If the mass involves only the inner layers of the retina, the separation will result in a small degenerated patch, with resulting thinned-out retina.

CORTISONE AND ACTH IN ALLERGIC ASTHMA

The effectiveness of cortisone and ACTH in controlling allergic asthma has been very exciting and gratifying, and, like epinephrine, they can be thought of as utilizing a natural mechanism of the body to suppress asthma. These hormones, however, have a Dr. Jekyl and Mr. Hyde "personality," because they can retard or suppress beneficial immune reactions that are needed for protection. At the same time, they suppress the undesirable immune reaction which is evidenced by allergic asthma that is not wanted.

One example will suffice. There is now experimental and clinical evidence to suggest that the immune mechanism which keeps tuberculosis under control is interfered with or suppressed under certain conditions of cortisone therapy. It now seems decidedly unwise, therefore, to administer cortisone to a patient who has both asthma and tuberculosis. Other important and necessary immune mechanisms may also be suppressed by this hormone, especially if treatment is prolonged.

It would seem at this time that, when cortisone or ACTH is used in the symptomatic treatment of asthma, it is safer when used over brief periods of two or three weeks. A course of treatment should be given only as often as recurrences demand. Helpful as these and other new remedies have been in the control of asthma, the best treatment is still to search for the cause of the patient's asthma and remove them, together with any complications that may be present. Thus the need for cortisone, ACTH, antihistaminic drugs, aminophylline, epinephrine, expectorants and similar preparations in the treatment of allergic asthma will be greatly minimized.—Louis E. Prickman, M. D., in Minnesota Medicine.

ECTROMELIA: CASE PRESENTATION*

By JEROME C. ARNETT, M. D.
Rowlesburg, W. Va.

Ectromelia, or total absence of one or more extremities, is a rare congenital deformity. Only about twelve cases have been reported to date insofar as can be determined.

In 1858 Hare[1] reported the first case of congenital absence of arms and legs. Mouchet and Roederer,[2] in 1924, reported a case of a 3 month old infant with absence of left fibula and other deformities, not actually considered ectromelia by our own definition. Price,[3] in 1928, reported the case of a 5½ pound male infant with amelia (absence of all extremities) which had a cherry hemangioma on the nose as the only other defect. The father was 42 years old and the mother 27, with four normal children previously in four years; the infant died of an intercurrent infection at eight weeks of age. Lereboullet et al,[4] in 1932, published a report of a single case of ectromelia.

Bizzaro,[5] in 1936, reported a case with total absence of right upper and lower extremities, with absence of left fibula and fifth toe, and an overdeveloped left acromion along with absence of glenoid. Levy,[6] in 1941, reported the case of a 5½-pound female infant amelus which he delivered in Clarksdale, Mississippi. This was the first child of the parents, the father aged 38 years and the mother 27, both of Greek descent. The child appeared normal but died a few minutes after birth. It had no other apparent deformities.

Killingsworth,[7] reported a case of ectromelia in a 4-pound male infant born in 1939 which had total absence of extremities except for a rudimentary foot (three small bones) in the right acetabulum. The infant was the third child, the previous two being normal. The parents were of French-American descent, the father aged 22 years and mother 18. Killingsworth reports that following survival of pertussis, diphtheria and scarlet fever, the child was placed in a nursing home at the age of one year. He was intelligent and could "roll about where he wished when placed on the floor." He learned to play with toys which he handled "with his shoulders, chin, mouth and neck." This child died at home at the age of 3 years, of diarrhea, malnutrition and unfortunate environmental circumstances.

Hedenstedt[8] reported two cases of amelia in Scandinavia in 1944 while in the same year Otero[9] reported one case in Spain. No details of these cases could be obtained. Stadler,[10] in 1947, reported the case of a 7 pound child of an unmarried 21 year old negro, with absence of left upper arm except for a 19-millimeter fragment of upper humerus and other deformities of extremities. In the same year Frasson[11] reported a case of total amelia.

To my limited knowledge, only one other unreported case[12] of living ectromelia is known, the child being now four years old and residing in Arkansas. This child has been fitted with prostheses and is in excellent health. Carlisle,[13] of Waco, Texas, is reporting in the near future a case of ectromelia which died at 7½ months. I feel sure that there are many unreported cases but very few are living, due partly to the frequency of other congenital anomalies and, more frequently, to the lack of special care required by these children, resulting in a high infant mortality.

CASE REPORT

On April 15, 1951, I delivered a 28 year old white American mother of a male infant weighing 6 pounds, 2 ounces. The father is a 38 year old Phillipino. The previous children, aged 7 and 4 years, are normal. The mother's prepartum course was normal. Examination of the child showed a cherry red hemagioma on the upper lip and nose. The upper extremities were mere stumps with about 2 centimeters of upper humerus in each. The shoulder girdles were normal. The right lower extremity was wanting; the left was small and malformed; the femur and fibula were wanting and the tibia was attached in a ball of muscle at the acetabulum. The foot contained three normal and one subnormal metatarsal bones and had four toes. The bones of the pelvis were normal.

The child was put to breast and given vitamins. He was circumcised on the 8th day. When three weeks old he weighed 7 pounds, 6 ounces; circumference of head was 15 inches, chest 14½, abdomen 14½ and length from tip of calvarium to center of right acetabulum was 14 inches. The child moved arm stumps and could roll from supine to prone position readily by head and trunk motion. When six weeks old he weighed 8 pounds, 12 ounces; circumference of head was 16¼ inches, chest 14½, abdomen 14½, and length was 15 inches. The hydrocele was reduced considerably in size. At the time of presentation of this paper the child is in excellent health at the age of 5 months.

*Presented before a meeting of the staff, Myers Clinic Hospital, Philippi, West Virginia, June 14, 1951.

Fig. 1 Front view age 8 weeks, 4 days.

Fig. 2. Back view age 8 weeks, 4 days.

Fig. 3. Side view showing stump without extremity, age 8 weeks, 4 days.

Fig. 4. X-Ray taken one hour after birth.

Fig. 5. X-Ray of tibia showing muscle mass with atypical attachment to acetabulum at age 7 weeks.

DISCUSSION

The etiology of ectromelia has not been thoroughly explained. Several theories have been advanced by competent men with some grounds for their belief: dietary deficiencies in the mother, also toxemias of pregnancy and placenta praevia have been mentioned.

The theory of intrauterine amputation by amniotic bands as a cause of absence of extremities does not seem plausible and has been abandoned by many embryologists within the past few years. According to Dodds,[14] this condition probably is an arrested development of limb buds which would become evident in the fifth week of embryonic life, when the embryo measured less than 10 millimeters. It may be due to a defect in the chromosome genes of one or both parents, although environmental conditions during early development cannot be ruled out.

It should be noted here that of a total of twelve reported cases, none are living today; however, one man is said to be living in Brittany, France, now in his sixties. It appears that there is a need for reporting these cases because of a multiplicity of problems to the pediatrician, obstetrician, orthopedist and general practitioner.

SUMMARY

A living case of ectromelia, otherwise appearing normal, is presented. The literature is reviewed. The etiology is discussed.

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FOR THE GOOD OF ALL

The field of opportunity for cooperation between public health and private practice is limited neither to communicable disease control nor to services for the indigent. Whatever proves most beneficial to the conservation, the promotion, or the recovery of health for the individual or the community patient has been observed to be good for the doctor. There are no exceptions of consequence to this rule.

When we prevent the preventable, provide for universal early case-finding, and arrange jointly for prompt and adequate treatment, no one suffers. The private practitioner is aided, and the public is benefited when state and local health departments work to prevent disease, assist in case-finding, and help to provide expensive equipment and facilities for treatment.—J. W. R. Norton, M.D., in N. C. Med. J.

LABORATORY AIDS FOR THE GP

Medicine is becoming less empirical and more scientific all the time, and in order to properly apply in practice the body of results obtained by the workers in research it is necessary for the general practitioner to become more familiar with these results and to develop a truly scientific approach to their practical application. He must become a better observer of disease than hitherto and he must approach his diagnostic and therapeutic problems with a greater critical sense than ever before. Inbred with this fresh interest he will always find that the laboratory offers very valuable assistance, because of its objectivity in the study of disease.—Jack Adams, M. D., in J. Tenn. St. Med. Assn.

RHEUMATIC FEVER*

By SAMUEL M. JACOBSON, M. D., F. A. C. P.,
Cumberland, Maryland

Rheumatic fever is the most important infection causing heart disease in younger people. Many things about it are unknown; we do not know its exact cause; we do not know the exact place of entry of the infectious agent; we have no specific treatment.

Between the ages of 5 and 19 rheumatic fever and rheumatic heart disease rank first as the cause of death. In spite of the fact that earlier recognition, prompt treatment and prophylactic care have resulted in a loiwering of the actual number of deaths, there has been a greater reduction in the number of deaths in this age group by other causes.

Rheumatic fever develops in 250,000 people in the United States each year.[1] About 500,000 people in our country today have rheumatic heart disease.[2] One hundred thousand selectees in World War II between the ages of 21 and 36 were rejected because of cardiovascular disease.[3] Further examination showed that about 50 per cent of these had rheumatic valvular disease.[4] Many reports have been published emphasizing the frequency and importance of first and recurrent attacks of rheumatic fever and rheumatic heart disease in the Armed Forces during World War II.[5, 6] Seven thousand, three hundred cases of rheumatic fever occur in the Armed Services each year.[7]

These and many other statistical studies regarding the development, natural course, contagious nature and results of prophylactic care of those exposed to epidemics of sore throats, rheumatic fever and other respiratory infections are resulting in an accumulation of such vital data that it is hoped that solutions to the unknown factors will not be far off.

ETIOLOGY

We do not know the exact cause of rheumatic fever but there is strong evidence to indicate that it is some type of streptococcus, most likely the S. hemolyticus.

The development of rheumatic fever has been divided into several phases:

2 to 4 days	24 days	10 days +	
Sore Throat	Silent Phase	Rheumatic Fever	Inactivity or Death
I	II	III	IV

Investigators have reported that following tonsillitis or pharyngitis in large groups such as in army camps where cultures have shown a great predominance of hemolytic streptococci, epidemics of rheumatic fever have occured three or four weeks later.[6] When penicillin is used in adequate dosage routinely in cases of upper respiratory infection, it has been shown that the occurrence of rheumatic fever is reduced considerably.

Rheumatic fever also has been observed three or four weeks following scarlet fever.[8]

Furthermore, it has been shown that people convalescing from upper respiratory infection due to the hemolytic streptococcus and those suffering from rheumatic fever have streptococcus hemolyticus antibodies (antistreptolysin) in their serum which neutralizes streptohemolysin and prevents its hemolytic action.

Those who oppose this thesis claim that the hemolytic streptococcus has not been found consistently in those who have the disease and that the disease has not been reproduced in laboratory animals.

The concensus is that the hemolytic streptococcus, if not the actual causative agent, probably has a part in precipitating or initiating attacks of rheumatic fever.

A great deal has been written about the allergic nature of rehumatic fever, i. e., that there is sensitivity to bacteria and their products instead of to proteins as is the case in asthma, or hay fever, or urticaria. This idea is used to explain a swollen joint containing no bacteria which follows a sore throat and responses of certain selective tissues to infections in distant parts of the body.

Because a specific causative organism has not been isolated it has been suggested that an unidentified virus might be the cause of rheumatic fever.

The response of rheumatoid arthritis and rheumatic fever to ACTH and cortisone suggests that an entirely new approach to the cause may develop.[9]

PREDISPOSING CAUSES

Rheumatic fever occurs more in the colder, wetter parts of the temperate zone, more in the colder and wetter seasons, winter and spring.[10, 11]

It occurs more amongst the poor, the undernourished, the underclothed; more amongst those who live in overcrowded cities and tenements or overcrowded barracks, more in those who are exposed to wet and cold; more in public schools than in private schools.

There is a definite family tendency to rheumatic fever. It is estimated that 32 to 50 per cent of these patients have relatives with a similar

*Presented before the Potomac Valley Medical Society, at Petersburg, West Virginia, June 20, 1951.

history.[12] Is this due to an inherited susceptibility, to close contact with the organism? Or is it due to the overcrowded unsanitary living conditions, to inadequate food and clothing, et cetera?

Rheumatic fever may occur at any age. It is said to be a disease of the second decade, but occurs mostly between the ages of 4 and 15 and most of these are from 5 to 10 years of age. It is rare in infancy.[13]

Females are affected more than males possibly because more females are affected by chorea. All races and nationalities are subject to it.

It can be epidemic.

PATHOLOGY

Rheumatic fever ravages many parts of the body.

During the active stage there is proliferation and exudation involving mainly collagen tissue. In the inactive stage healed scars may be present as a result of the inflammation.

In every case of rheumatic infection there probably is some heart disease. It may be slight, it may be transient, there may be complete recovery.

One may have endocarditis involving the mitral valve and tricuspid or both of these and the aortic valve.

One may have pericarditis, fibrinous or serofibrinous in nature, with or without effusion or adhesions.

Although we are taught that the typical lesion of a rheumatic infection is the Aschoff body in the myocardium, some think now that it is a late reaction and that the earliest tissue change is a destruction or necrosis in the myocardium with a tendency to hemorrhage throughout the body. Be that as it may, the myocardium is most affected. This may lead to cardiac dilatation, myocardial failure and death, or to permanent myocardial enlargement, or to complete recovery. The conduction system may be affected.

Or, one may have pancarditis when all three layers of the heart are affected.

But rheumatic fever may affect the joints, the brain (causing chorea), the aorta, the pulmonary arteries, the peripheral vessels, the lungs, the pleura, and the diaphragm.

The results of this infection are as varied as its manifestations. It is a slow infection and has a tendency to recur. It may clear up entirely and seemingly no residual pathology remains, or scars of the endocardium with deformity of the valves may result; chronic adhesive pericardial damage may remain or a residual myocardial lesion may ensue, either of which may carry a permanent heart block or ventricular dilatation.

SYMPTOMS

In rheumatic fever as in other infections the symptoms and their severity will vary with the virulence of the infection and the resistance of the patient, but many believe that this is due more to the difference in response on the part of the host rather than to the difference in the strain and virulence of the organism. This accounts for the many so-called atypyical cases of rheumatic fever.

All of us are familiar with the typical attack of acute rheumatic fever. A child or young adult has had a sore throat, acute tonsillitis, a middle ear abscess. Following a latent period of one to four weeks, he begins to complain of pain in one or another of his joints. The joint becomes more painful, swollen, tender and red. The patient has fever and perspires freely; his heart rate is rapid, he loses weight and becomes pale and anemic. There is leukocytosis. One joint, either spontaneously or with salicylate therapy clears up and another becomes affected. It is a migratory type of arthritis. The heart sounds are rapid and bounding in character; sometimes there is pain or aching over the precordium without any evidence of pericarditis or pleuritis. Occasionally in young adults there may be angina pectoris. Premature beats or paroxysmal tachydardia may cause palpitation.

We are also familiar with the typical attack of chorea (St. Vitus Dance) in which a child very gradually develops purposeless, involuntary, peculiar, nervous twitchings and movements of his muscles.

But most cases are not textbook pictures. Rheumatic fever may be mild or hardly noticeable. A child, either following some upper respiratory infection or not, may become pale, anemic, lose his appetite, not be able to run as much or as fast as his fellow classmates (weakness); he may have repeated nose-bleeds without any discernible cause and this may go on for months before any noticeable joint symptoms occur. Indeed, joint symptoms may never occur. He may have pains occasionally in the muscles of his thighs or the calves of his legs which grandma labeled "growing pains."

Arthritis following a joint injury or the inflammation of a single joint or inflammation of neighboring tendons and muscles (tenosynovitis, myositis, tendinitis, bursitis) may delay an accurate diagnosis.[14]

Certainly many such mild cases go unnoticed and gradually get well without discovery. These

are the cases of young and older people in whom one discovers in routine examination years later, evidence of old valvular disease with no history of rheumatic infection in earlier years.

Repeated nose-bleeds (epistaxis) is an important lead. Repeated vomiting spells with or without slight tenderness or pain in the abdomen constitute another important symptom. If these are accompanied by slight fever and leukocytosis it is easy to see how occasionally an innocent appendix is taken out.

In the same light there are many atypical cases of chorea that tax the diagnostic acumen of the physician. Subcutaneous nodules are pathognomonic of rheumatic fever. They occur mostly in childhood but may be present in young adults.

The erythematous diseases such as erythema annulare, e. marginatum and e. multiforme which occur mostly on the trunk but which may appear on the extremities are believed by some to be specific for rheumatic fever.

The heart is practically always involved. The damage is slight or great without any correlation to the severity or mildness of the rheumatic infection. The heart may be slightly enlarged and one may hear a systolic murmur at the apex or a slight diastolic murmur along the left sternal border. Or, the heart may be enormously enlarged with several murmurs, and this may go on to absolute arrhythmia with congestive failure and even death. One may have any combination between these two, or the murmurs may disappear and the heart return to normal as the infection subsides.

DIAGNOSIS

The diagnosis of rheumatic fever, then, may be comparatively simple: acute arthritis, polyarthritis of the migratory type, with fever, pain, swelling, redness, and usually a good response to salicylate therapy; with leukocytosis, an increased sedimentation rate following tonsillitis or some other upper respiratory infection.

In cases that are not clear-cut, however, one must delve into other important factors: the family and past history, the season of the year, a history of epistaxis or vomiting, fatigueability, loss of weight, anemia, anorexia, sweats, peculiar tachycardia and bounding pulse and heart beat, the development of cardiac murmurs with or without cardiac dilatation.

There are other valuable signs that might be of some aid in making a diagnosis of rheumatic fever.

Rheumatic nodules, when found, are indicative of both the activity of the infection and its severity. They vary in size, number and location, depending on the severity of the disease. They are subcutaneous nodules attached to the tendon sheaths, periosteum, in the joint capsules over the elbows, knees, ankles, skull, fingers, toes, wrists or shoulders.

Skin rashes such as erythema multiforme e. marginatum or e. annulare are the commonest cutaneous signs accompanying rheumatic infections.

Examination of the blood will reveal leukocytosis, hypochromic anemia and in increased sedimentation rate. Of course, the sedimentation rate is increased in many other infections but it serves as an indication of activity and together with the fever and leukocytosis it serves as a guide to the length of bed rest.

The electrocardiogram may be of considerable diagnostic aid. In many cases of atypical rheumatic fever with slight fever and vague abdominal pains, electrocardiographic evidence of a lengthened auriculoventricular (P-R) conduction time may clinch the diagnosis. The electrocardiogram, however, may be normal or it may show abnormal T waves, intraventricular block, axis deviation and the presence of other arrhythmias.

The x-ray, of course, will show enlargement of the cardiac silhouette and the presence of pericardial effusion.

Rheumatic heart disease may be present without active rheumatic fever. More than half of the number of young adults with rheumatic heart disease present no history of rheumatic fever.[4] To determine the etiology a previous history of rheumatic fever is important. The character and location of the murmur or the combination of murmurs and the type of fluoroscopic or roentgenographic silhouette may be helpful in making the diagnosis.

DIFFERENTIAL DIAGNOSIS

The difficulty is not that rheumatic fever is mistaken for other diseases but, on the contrary, nonspecific symptoms of infection may lead one to label the disease rheumatic fever:

1. Subacute bacterial endocarditis early in the disease with prolonged fever when the usual signs of the disease have not been noticed or sought for.

2. Upper respiratory infections with low grade fever especially if associated with muscular or articular pains.

3. Pulmonary tuberculosis.

4. Still's disease in children. The type of joint involvement, x-ray evidence, the absence of cardiac involvement and absence of electro-

cardiographic abnormalities should help to make the diagnosis.

5. Rheumatoid arthritis in adults.

6. Blood dyscrasias such as Cooley's anemia or leukemia can be differentiated by blood studies and roentgenologic studies.

7. Poliomyelitis can be differentiated by the paralysis and spinal fluid changes.

8. Undulant fever may be characterized by continued fever and arthralgias. The history, skin tests, agglutination reaction and blood cultures should serve to make a diagnosis.

9. Acute appendicitis and acute rheumatic fever may occur concurrently or the former may occur during the course of rheumatic fever. At times abdominal exploration can not be avoided. However, a careful history and study of the signs and symptoms will most often avoid a fruitless operation.

The foregoing are the most important amongst a variety of diseases that may in one way or another simulate rheumatic fever.

PROGNOSIS

The accumulated evidence of thousands of carefully studied cases of rheumatic fever allows one to prognosticate fairly accurately what may happen in a given case.

The patient usually survives the first infection but repeated infection is the usual rule.

The younger in life the patient is when he has his first attack, the more likely he is to have cardiac involvement.

When the first attack occurs before age 10, 75 to 90 per cent have recurrences.[15] The earlier in life one has cardiac involvement the more serious it is likely to be and the shorter the life expectancy.

The older a person is when he has his first attack of rheumatic fever, the less risk he runs of repeated attacks. However, he does run the risk of four complications:

(1) auricular fibrillation
(2) congestive heart failure
(3) subacute bacterial endocarditis (S. viridans)
(4) embolization

The outlook in congestive failure is much improved now with the use of digitalis or digitalis-like preparations, mercurial diuretics, salt-poor diets and ion exchange resins; the outlook in subacute bacterial endocarditis is improved when recognized early and the newer antibiotics are properly used.

Embolization usually occurs when mitral stenosis is present and especially if associated with auricular fibrillation or cardiac failure, or both. The embolus may lodge in the brain, in the middle cerebral artery, the abdominal arota, or the large vessels of the legs; or pulmonary infarcts may result from repeated emboli or from a mitral thrombus in the right auricle. Recently the use of anticoagulants such as dicumarol or tromexan in ambulatory patients who have been followed carefully has given encouraging results.

Over 50 per cent of patients have detectable cardiac involvement with the first attack. Those who have no detectable heart disease with the first attack do best at the end of ten years.

An attack of rheumatic fever lasts a variable period of time. Mild cases may last but a week or two because the low grade fever, mild arthralgia or respiratory symptoms seem to disappear in that period of time. A fully developed attack usually last three to eight weeks. During this period the clinical symptoms disappear but usually the other evidence of active infection such as the leukocytosis, the sedimentation rate and the electrocardiographic evidence may not approach normal for as long as six to eight months.[16] Rheumatic activity or cardiac failure for longer than six months denotes a serious prognosis.[17]

Death in rheumatic fever results usually from heart failure or a complicating infection.

COMPLICATIONS

Besides the four complications just mentioned other conditions may complicate the picture of rheumatic fever:

(1) coronary artery disease
(2) essential hypertension
(3) syphilitic arotitis
(4) congenital defects
(5) thyrotoxicosis
(6) emphysema
(7) neurocirculatory asthenia

TREATMENT

The treatment at the present time is entirely symptomatic. It is the usual rule to use salicylates either as the sodium salt with sodium bicarbonate or aspirin (acetylsalicylic acid.) Intensive salicylate therapy can cause hypoprothrombinemia[18] and possibly hemorrhagic manifestations and death. Hence, it is important that during the prolonged use of salicylates the prothrombin time be determined periodically and the drug stopped if necessary and vitamin K administered.

Cortisone and ACTH are effective in rheumatic fever[19, 9, 20] but the effectiveness depends on a

number of factors.[21] Best results are obtained when the medication is given early in the disease. Then the fever may subside, the joint swelling and pain recede, the heart size approach normal, the sedimentation rate, blood count and electrocardiogram become normal, and the murmurs disappear. However, if one waits several weeks after the onset of the disease before starting the medication, the murmurs which were present before treatment will not disappear. In the same way rheumatic carditis responds better when treated early.[22] It is very doubtful that cortisone or ACTH shortens the natural duration of acute rheumatic fever.[23] Neither one will prevent recurrences.

PROPHYLACTIC TREATMENT

The objective is the prevention of rheumatic fever and its recurrence.

SOCIAL-ECONOMIC

The improvement of the social-economic conditions of the poor, elimination of slums and overcrowding, improvement in sewage disposal and in water supplies, education in the preparation of family meals and other measures to prevent and eliminate undernutrition, education in the prevention of disease, improvement in working conditions, all of these are important in the prevention of rheumatic fever.

SULFONAMIDES

Before the advent of penicillin the sulfonamides were used routinely in small doses during the "dangerous" months (October to April) and were effective in preventing recurrent attacks in susceptible children, lessening both the severity and frequency of such attacks.[6] They were also used prophylactically in hemolytic streptococcal infections with promising results. Frequent determinations of the sulfonamide blood level were necessary and the difficulties of complications due to sensitivity to these drugs were always present.

PENICILLIN

Although there is still no crystallization of opinion regarding the effective use of penicillin, evidence is accumulating that its use will effectively prevent the occurence of rheumatic fever when hemolytic streptococcal respiratory infections are treated early with penicillin intramuscularly.[7] The most effective schedule seems to be one in which 3 injections of depot penicillin are given over a 96 hour period for a total of 1,200,000 units.[24] Massive doses are needed to accomplish the same results when the oral route is used.[25]

To prevent recurrence in susceptible individuals good results have been reported in the routine use of 800,000 units of penicillin by mouth per day during the first week of each month from September to April.[26]

Penicillin is also indicated in such individuals before tonsillectomy, teeth extraction or any other surgery.

TONSILLECTOMY

Although it has not been proven that the tonsils are definitely a focus of infection in rheumatic fever, it has been proven that children whose tonsils are removed after the first attack do slightly better than those whose tonsils have not been removed. Because economic factors are to be considered and because certain complicating risks are greater in older patients who have tonsillectomies, it is better to do the operation in younger people. This also, if effective, is better done in May and June than in August, September and October when poliomyelitis is more prevalent.

Avoidance of upper respiratory infection is easier said than done, but often an acute attack of rheumatic fever occurs right after exposure to wet or inclement weather.

CLIMATE

While it has been shown that rheumatic fever generally is less persistent in warmer areas the transfer of large number of rheumatic fever patients to such areas is replete with many difficulties. They may also have recurrences in the south. Shall they remain there throughout their lives? Are they not more likely to have recurrences should they return to the north? Since rheumatic fever occurs more in the lower economic groups, how can these difficulties be overcome?

CHOREA

The treatment of chorea, because of the variations from mild to severe, atypical to typical, is not specific. Bed rest, quiteness, proper nursing care, mild sedation with phenobarbital or bromides are usually helpful. Fever therapy by typhoid vaccine and foreign protein is not used very much now.

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HOMES INSTEAD OF INSTITUTIONS

In recent years more and more thought and effort has been devoted to the problems of the aged, and as a result homes for older people are no longer custodial institutions where residents sit around waiting to die. Many are now progressive institutions where men and women attain a new lease on life.

While tremendous advances have been made in the past few decades, it is only recently that the psychiatrist has appeared on the scene. He has been there long enough, however, so that his role in the institutional program can be evaluated.

To understand his role, it is necessary to know something about the present-day psychological approach to the aged. This approach begins with the thesis that people are people regardless of their age. Older men and older women are not cut to one pattern any more than men and women in other age groups.

Second, they do not live in a second childhood. While the effects of senility take their toll, there are still a great many people in their 80's and 90's who have retained a large portion of their emotional maturity.

Third, older people can and do learn new things. While there may be some impairment, an appreciable part of the capacity to learn may be retained throughout life.

Fourth, the aged can lead active lives.

Fifth, they have much to live for if one's interest is maintained at a high level.

Finally, they can live in the present. The more fascinating everyday life is, the less inclination there will be to turn to the past.

What an older person is like is determined by personality patterns established during the formative years, by life experiences and by external and internal stresses which arise during the latter years. Pressures may be taken in stride or may result in an accentuation of lifelong traits or a break-through of underlying, hidden tendencies. These stresses include physical disability, economic problems, and rejection of a feeling of being unwanted.—Marc H. Hollender, M. D., in Geriatrics.

PSYCHOGENIC FACTORS IN ALLERGY

The physician in his everyday practice is prone to think of psychogenic and psychosomatic problems as mental diseases in which the thinking is not properly controlled. We still have not completely rid ourselves of thinking of the troubles of the patient with functional disease as being in his mind. There is a tendency to forget that mental life includes unconscious as well as conscious processes. Feelings, rather than conscious thinking, create the problems for which many patients seek our help. Often the little issues in life precipitate emotional crises.

The patient's attitude toward these often minor issues of life may make the difference between health and psychogenic disturbances.

As a specific example of how emotional tone, feelings and attitudes in everyday life affect allergic diseases, consider the young housewife and mother with an eczematous contact dermatitis. She is naturally frustrated by the limitations imposed upon her necessary activities such as just keeping a little child clean. She removes her hands from soap and water by the proper use of gloves, applies the usual ointments, but still may find that this is not enough to remedy her problem. In this case, insight, reassurance and sedation given by her physician will greatly facilitate her recovery.—M. G. Fredericks, M. D., in Minnesota Medicine.

SUPER-HIGHWAYS IN CANCER RESEARCH

It is gratifying to note the progress being made in our knowledge of the cause of cancer. Old avenues of study such as "morbid anatomy" and "clinical course" have become gutted with use and have ended in blind alleys. New super-highways are traversing the unknown lands of the physiology and chemistry of the cancer cell.

The April, 1950, issue of Cancer Research lists no less than 160 cancer exploratory projects in the United States. Little by little the brush is being cleared away from the shoulders and new pavement is being laid down, carrying us closer to the cause of cancer.

Though our goal has not yet been achieved, the summit will be reached some day, and the abnormal chemical structure and metabolism of the cancer cell will be known. The road to the attack of the cancer problem at its origin will then be down hill. With all these eager investigators at work, the cause of cancer may yet be found in our lifetime! God bless the research worker!—J. Iowa State Medical Society.

TUBERCULOSIS ABSTRACTS*

SPECIFICITY OF THE TUBERCULIN TEST

Few procedures employed in the campaign to eradicate tuberculosis have been of greater value than the tuberculin test. It has been useful in the diagnosis of tuberculosis in the patient and priceless in studying epidemiology and public health practices in tuberculosis control. It has been used to determine the incidence of development of tuberculous infection in exposed groups, and studies of the tuberculin reactions in nurses have defined the limitations on its specificity and reliability with true tuberculous infection.

In modern medicine specific tests must be quantitative. The Mantoux tuberculin test supplies the quantitative aspect lacking in the earlier von Pirquet. The introduction of purified protein derivative (PPD) is a further refinement. Without a standard tuberculin, analyses of results on the specificity and stability of the tuberculin reaction would have little meaning.

The specificity of the tuberculin reaction has been called into question not a few times. Lumsden and his colleagues in 1939 failed to correlate tuberculin reactions and the calcifications of supposed primary tuberculosis in investigations in two areas. The later correlation of incidence of pulmonary calcification with reaction to histoplasim and other evidence indicating that the calcifications in question are probably residues of histoplasmosis or other related infections has been a triumph of epidemiologic research. As a result, confidence in the specificity of the tuberculin reaction emerged to a higher level than ever before.

The problem of the relative specificity of low and high doses of tuberculin however is still unsolved. The correlation of strong reactions to weak doses of tuberculin with recent active or progressive tuberculous infection is clear. However, a correlation of weak reactions to strong doses of tuberculin with evidence of past or inactive tuberculous infection has been hard to establish. The assumption has been that allergic levels vary enormously and that high doses of tuberculin may be necessary to bring forth evidence of true tuberculous infection in persons natively sluggish in allergic response, or low in sensitivity because of a long lapse of time since the sensitizing infection.

Numerous facts support this assumption. Racial variations as well as variations in physiologic state, such as those caused by nontuberculous infections, pregnancy, hormonal influences, and nutritional factors are known to modify the intensity of the reaction. The fact that originally weak sensitivity tends to fade with time suggests that the vigorous reactions observed in intimate contacts of persons with open tuberculosis are the aftermath of a constant stimulation of sensiticity by repeated subclinical infections.

A paper by Tukey, Du Four, and Seibert throws light on the first of these problems. Serial tuberculin tests in a large number of student nurses tested at three-month intervals in their training course revealed a small cumulative increase in the incidence of reactions to the first-strengh test dose of PPD (0.00002 mg.), which might be attributed to true tuberculous infection, and also a fluctuation in sensitivity to the second dose (0.005 mg.), from negative to positive and again to negative, in many students who never reacted to the first dose. The repeated injections themselves appeared to be ruled out as a cause of sensitivity. A recent analysis led the authors to conclude that these changes may be due to slight infection and gradual recovery.

However, another possibility remains open. In the same city, Teague and Placentra called attention to the fact that during the last 20 years studies with the standard tuberculin PPD in reprseentative high schools have shown a steady and striking decline in the incidence of reaction to the first dose of PPD, but little drops in the incidence of reaction to the second dose. The drop in reaction to the first dose could be correlated with the decline in mortality from tuberculosis, but the persistence of sensitivity to the second dose may well be due to organisms other than the tubercle bacillus.

An exhaustive analysis of a series of tuberculin reactions in nurses in many states, by C. E. Palmer and his associates, has shown extraordinary geographic variations in the pattern of reaction. They showed a significant correlation between tuberculosis mortality rates and frequency of reaction to the first dose of tuberculin. This was consistently higher in urban than in rural communities, which suggest that contact with other human beings is concerned. Reactions to the second dose in subjects failing to react to the first were not correlated with other evidence of tuberculous infection or with the frequency of reaction to the first dose of tuberculin. Within certain geographical areas, the level of second-dose sensitivity was remarkably uniform despite substantial variations in the percentages of first-dose reactions. These facts led the authors to the conjecture that an organism different from, but allergenically resembling, the tubercle bacillus is concerned. The geographic pattern and rural relationship suggest that a warm and moist climate and subtropical vegetation may be important.

Thus two important possibilities in explanation of weak and fluctuating reactions to tuberculin remain. The first is that these reactions may be responses to intermittent slight infections with true tubercle bacilli. The loss of sensitivity in reactors exposed to tuberculosis after the contact is discontinued and the low level and not infrequently waning of sensitivity after BCG vaccination furnish strong evidence that this possibility is a real one.

The other explanation is infection by acid-fast microorganisms other than the tubercle bacillus. Evidence in favor of this is indirect, but suggestive. A direct attack on the problem is possible through experiments on sensitization of man by such bacilli and investigation of low-sensitivity reactors for infestation with acid-fast bacilli that might be responsible for the reaction.—Esmong R. Long, M. D., in The American Review of Tuberculosis.

*Issued monthly by the Notionol Tuberculosis Associotion ond furnished through the courtesy of The West Virginio Tuberculosis ond Heolth Associotion.

The President's Page

The establishment of grievance committees by county medical societies, with state committees as boards of appeal, is probably the most important step physicians have taken to date in their public relations programs. Such committees have been set up by thirty-six state medical associations and over four hundred county medical societies.

The West Virginia State Medical Association and component societies were among the first to create grievance committees.

These committees have received a great deal of publicity on the national level. For example, there is an excllent article by Alice Lake in the August, 1951, issue of the American magazine entitled "The Doctors Clean House." However, on the local level, the establishment of these committees has received very little publicity with the result that probably the majority of our people are not aware of their existence.

We suggest that each component society publicize in every way possible the appointment of county or area grievance committees to work with the state grievance committee set up under the provisions of our by-laws. In this way, the public will know definitely that the medical profession is ready and willing to consider and take necessary action upon any complaints concerning medical services in this state.

Frank J. Salvaggio

President.

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THE JACKSON'S MILL CONFERENCE

The theme of the fourth annual Rural Health Conference, which is being held at Jackson's Mill while this issue of the Journal is on the press, is "Community Health Councils." It is most encouraging to those who believe that many of our problems of medical and hospital care can be solved locally to have this whole question brought out into the open and discussed by those who have given the idea mature thought, as well as by those who have participated actively in the organization of community efforts in the health field.

According to Dr. N. H. Dyer, state director of health, three county health councils have already been organized and are functioning successfully. The first council was organized in McDowell County, with the superintendent of schools, Mr. George W. Bryson, of Welch, as its head. The council is still very active and is considered to be one of the best in this part of the county.

The Logan county council was organized early in 1951, and is continuing to meet once a month. Its main purpose is to coordinate the work of the various health and social agencies and to endeavor to establish a better understanding among the health groups in that county. The Preston county society, which meets on an average of every three months, studies current county health problems and endeavors to suggest solutions, and undertakes to provide health education for the public. It also stimulates public support for the program of the local health department.

These three societies may well serve as the nucleus for a strong community health council program in West Virginia, and it is hoped that at the meeting at Jackson's Mill some definite conclusions may be reached with reference to the expansion of work in this important field.

Community welfare councils with health sections have already been set up in Huntington, Kanawha and Monongalia Counties, and the work in these areas is progressing most satisfactorily. Other agencies with active health sections have been organized at Martinsburg, Fairmont, Charleston, Weston, Berkeley Springs, Beckley, Parkersburg, and Wheeling.

It is apparent to those who have made a study of the situation that the doctor shortage in West Virginia will continue to exist for some time to come. The problem can be solved to a certain extent by the location in this state of more doctors. With the establishment of the four-year school of medicine and its construction within the next few months at Morgantown, it is hoped that the number of West Virginia students graduating in medicine who locate for practice in their home state will be substantially increased. However, the most conservative estimate is that the school cannot possibly be in operation for at least two years.

In the meantime, the hope for better medical care for our people lies in the establishment of community health councils and the building of community health centers similar to the project at Morgantown. The work must be initiated in communities themselves, and, to be successful, must have the support of the state department of health and the West Virginia State Medical Association.

Great good can come from the conference at Jackson's Mill, and with the proper community efforts, areas desperately in need of medical care can have community centers where care to a limited degree may be available on a round-the-clock basis.

BOOSTING ATTENDANCE AT MEETINGS

Some of our component societies and local auxiliaries which have held meetings during the late summer and early fall report increased interest among their members as evidenceed by a better attendance at such meetings than has been the case during the past several months.

Perhaps the scientific offerings or entertainment has something to do with this. We still hold to the belief that if interesting and instructive programs are arranged for these meetings, members will make an effort to be present.

We have more than 1400 members in our 29 component societies, most of which meet regularly. Guest speakers for the most part go along with the idea that the subject assigned to them must be discussed in a way that will be of interest to general practitioners as well as members of the specialty groups. Very seldom do we hear it said that a speaker before a local society confines his discussion to matters of interest only to members who limit their practice to a particular specialty.

When invitations are extended to guest speakers, many of our societies make it clear that it is most desirable that the paper to be presented be prepared with the idea that the audience will be composed of general practitioners as well as representatives of practically all of the specialty fields. This method has been followed by committees which arrange programs for our annual meetings with the result that papers presented at general sessions are usually interesting to all of the members of the Association who attend annual conventions.

Increased attendance means increased interest in the problems of medicine, and various methods are being used by local societies to assure a continued increase in the number of members who attend regular meetings. It has been found in some areas that the attendance has been boosted considerably with the inauguration of dinner meetings. Other societies have advanced the hour of meetings with a definite time set for adjournment. Still others use a "call system," some one person being charged with the task of calling each member by phone on the day meetings are to be held.

The method to be used to increase attendance will necessarily vary in different parts of the state. Probably the most effective means of assuring a large attendance is to provide such interesting scientific programs that each doctor will feel that it is a "must" for him to be present at the meetings.

COMMUNITY CHEST TIME

Four million children in America have lost a mother or father. Nearly a million boys and girls became involved with the police each year. The number of births is rising, and life expectancy figures are higher.

All this means an increased load for Red Feather services——increased calls upon health services, youth services, family aid and welfare services and child care services. Yet to keep these services going at the same level as last year costs more. Food costs more, maintenance costs have mushroomed, even transportation costs are higher.

For these reasons, Community Chest agencies must seek more funds in their campaigns this year. But there is another factor, too. That factor is the inclusion in the Community Chest family of the new United Defense Fund.

In the rice paddies of Korea . . . in the cold of Alaska . . . in the heat and sweat of training camps . . . at the lonely outposts of occupation and defense, America's servicemen and servicewomen are doing a job for their country. The citizens here can do a job for these young men and women . . . providing them with the "little things" that make the tougher side of G. I. life a little easier to take.

These "little things" mean such items as a decent place to spend off-duty hours; wholesome recreation and fun; a friendly hand with personal problems; contact with the civilian community; and a chance to keep in touch with the way of life they are fighting to preserve.

The United Defense Fund, the newest of Red Feather services, will mean funds for USO camps, clothing for Koreans, and emergency services in defense-hit communities. This is the big plus factor in Chest campaigns for 1951-52.

So far as regular Red Feather services are concerned, the largest percentage of funds, some 31.8 per cent, goes for youth and character-building services such as scouts, summer camps, YMCA, YWCA, and boys clubs. Family aid and welfare services account for approximately 17.8 per cent of the Community Chest dollar yearly. This includes assistance, particularly in the counseling field, for people with troubles. Such troubles include inability to cope with family budgets, marital problems, problems in connection with adjustment to social, emotional, and environmental conditions, and child behavior problems,

Health services get some 10 per cent; while child care services take about 16.9 per cent of the funds. These are the four major divisions in the Red Feather service group.

It will take a larger measure of participation by all members of the community to see that the job is done when Community Chest time comes round. The slogan used for many years is still good: "Everybody Benefits . . . everybody gives."

GENERAL NEWS

FOURTH RURAL HEALTH CONFERENCE IN PROGRESS AT JACKSON'S MILL

As this issue of the Journal is on the press (September 28) the Fourth Annual Rural Health Conference is in session at Jackson's Mill. The meeting is being sponsored by the public relations committee of the West Virginia State Medical Association with the full support of the state health department and the agricultural extension service of West Virginia University.

The co-chairmen of the committee, Dr. John F. McCuskey, of Clarksburg, and Dr. Paul L. McCuskey, of Parkersburg, are in charge of the meeting, the theme for which is "Community Health Councils." The meeting was scheduled to get under way at 10:30 o'clock, with the following program to be presented at the morning and afternoon sessions:

"Aims of the Conference."—John F. McCuskey, M. D., Clarksburg, and Paul L. McCuskey, M. D., Parkersburg, co-chairmen, Public Relations Committee.

"Community Interest and Aid Necessary to Success of Health Councils."—Frank J. Holroyd, M. D., Princeton, President, West Virginia State Medical Association.

"West Virginia Can Have Community Health Councils."—N. H. Dyer, M. D., Charleston, State Director of Health.

"The Story in Monongalia."—Alice Van Landingham, Morgantown, Monongalia County Health Department.

"Health Councils for Healthier Communities."—Sewall Milliken, Acting Director, Public Health Education Division, Ohio State Department of Health, Columbus.

"Why Wait? Let's Do It Ourselves."—F. S. Crockett, M. D., Chairman, AMA Committee on Rural Health, Lafayette, Indiana.

Following Doctor Crockett's address, the program calls for a panel discussion on community health councils, which will be led by Miss Gertrude Humphreys, of Morgantown, State Leader, Home Demonstration Work, Agricultural Extension Service, West Virginia University. Miss Humphreys is a member of the AMA Advisory Committee on Rural Health.

The list of out-of-town guests attending the meeting includes Mrs. Arline Hibbard, of Chicago, Secretary of the AMA Committee on Rural Health, and Mr. Raymond Jones, of Louisville, Field Secretary of the Kentucky State Medical Association.

Groups which will be represented at the meeting include the farm bureau, farm women's council, state department of health, agricultural extension service of West Virginia University, the state grange, West Virginia University School of Medicine, labor organizations, and medical and hospital service plans.

Officers of county farm bureaus, farm women's councils, county health officers and nurses, county agents and home demonstration agents were also expected to be present.

Those attending the conference were to be guests of the State Medical Association at a noon luncheon in the Mount Vernon dining hall.

NEW HEALTH OFFICER FOR DISTRICT NO. 5

Dr. John A. Love, a native of Moorefield, has accepted appointment as health officer for District No. 5, with headquarters at Romney, succeeding Dr. C. Clyde Coffindager, who resigned to engage in general practice at Clarksburg. Announcement of the appointment was made by Dr. N. H. Dyer, state director of health.

Doctor Love, who is the son of Dr. R. W. Love, of Moorefield, has been serving as a local health officer in Virginia.

DIABETES WEEK, NOV. 11-17

The week of November 11-17 will again be observed over the country as "Diabetes Week," and the American Diabetes Association will for the fourth time spearhead a nationwide Diabetes Detection Drive.

The year-round diabetes detection program, approved by the American Medical Association, is the only broad health education and case finding program developed exclusively by the medical profession. Its objectives are to further the detection of diabetes among the public, and to disseminate general information about the disease.

Committees on diabetes have been named by 28 state medical associations and by over 500 county medical societies. In West Virginia, besides the State Medical Association's committee on diabetes, which is headed by Dr. George P. Heffner, of Charleston, ten county medical societies have already appointed local diabetes committees.

RELOCATIONS

Dr. Samuel S. Shorter, formerly of Ward, has located at Middletown, New York, where he will engage in general practice. His address there is 46 Highland Avenue.

* * * *

Dr. N. D. Priddy, of Ravenswood, has moved to East Hartford, Connecticut, where he will engage in general practice. He has offices there at 759 Main Street.

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Dr. Philip L. Azar, of Wheeling, has accepted a three-year residency in radiology at the Veterans Hospital at Jefferson Barracks, Missouri.

* * * *

Dr. Charles H. Hagen, Jr., of Holden, has moved to Lorado, where he will continue in general practice.

* * * *

Dr. Eugene J. Nicgorski, formerly of Elbert, McDowell County, who has been located at Salem, Massachusetts, for the past few months, has moved to Whitesville where he will continue in general practice.

* * * *

Dr. Robert R. Pittman, of Cass, has moved to White Sulphur Springs, where he will continue in general practice with offices at 79 E. Main Street.

Dr. Eric W. Walter, formerly of Quinwood, Greenbrier County, has moved to Bismark, North Dakota, where he will continue in general practice. His office address there is 1012 Twelfth Street.

* * * *

Dr. G. E. Irvin, of Grace Hospital, Welch, has gone to Philadelphia where he will take the PG course in internal medicine at the University of Pennsylvania Graduate School of Medicine.

* * * *

Dr. E. Lowell Berry, of Montcoal, has enrolled for a year's study in industrial medicine at the University of Pittsburgh Graduate School of Public Health under a Rockefeller Foundation fellowship. He has been engaged in industrial practice at Montcoal for the past several months.

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Dr. N. F. Hines, of Huntington, has moved to Connecticut, where he has accepted a two-year residency in anesthesiology at the Hartford Hospital, in Hartford. His home address is Fairview Drive, Elmwood, RFD, Connecticut.

* * * *

Dr. Sam I. Nichols, who has been engaged in industrial practice at Burnwell for the past several months, will leave early in October for Philadelphia to take postgraduate work in internal medicine and gastroenterology at the University of Pennsylvania School of Medicine.

* * * *

Dr. C. Clyde Coffindaffer, who has been serving as health officers for District No. 5, with headquarters at Romney, has resigned and moved to Clarksburg where he will engage in general practice. He has offices there in the Professional Building.

* * * *

Dr. Helen Belknap Fraser, of Charleston, pediatric consultant to the division of maternal and child health, state department of health, has enrolled at the University of Pittsburgh School of Public Health, where she will take work looking toward a master's degree in public health.

HOSPITAL ADMINISTRATOR RECEIVES AWARD

Mr. T. Harvey McMillan, of Charleston, administrator of the McMillan Hospital in that city, was elected a fellow of the American College of Hospital Administrators at the convocation held in St. Louis, September 17. This award is conferred annually on those who have achieved distinction in improving hospital administration and public health in accordance with the standards set by the college.

DR. E. L. COFFIELD IN ACTIVE SERVICE

Dr. Elmond L. Coffield, of New Martinsville, has been commissioned first lieutenant in the Medical Corps of the Army. He reported September 7, 1951, for active duty at the station hospital, Fort Bragg, North Carolina.

Wife to husband after several rounds of drinks at a cocktail party: "Henry, don't take another cocktail. Your face is already getting blurred."—Anon.

WEST VIRGINIA SCHOOL OF MEDICINE RECEIVES FIRST GRANT FROM NFME

West Virginia University School of Medicine has received a grant of $7,500.00 from the National Fund for Medical Education, which will be used without restriction in support of its instructional budget. Announcement of the grant to the Morgantown institution was made early in September by the dean of the medical school, Dr. E. J. Van Liere.

At the same time, grants in a similar amount were made to all other accredited two-year medical schools in the country. Each accredited four-year school received the sum of $15,000.00.

The National Fund for Medical Education was established in May, 1951, with former President Herbert Hoover as the honorary chairman and S. Sloan Colt, president of the Bankers Trust Company, New York City, as president.

Contributions of doctors to the American Medical Education Foundation are funneled through the National Fund for Medical Education. The grants of funds to medical schools just announced are being made in conformity with the program of the Fund.

Contributions to the Fund are already well in excess of a million dollars toward the five million dollar goal announced for the first year. The chief objective of the organization is to seek voluntary contributions in order to relieve the acute problem confronting medical schools in endeavoring to maintain high academic standards in the face of crippling budgetary problems.

According to President Colt, appropriate machinery has been set up to distribute the money collected equitably among the nation's medical schools. In the development of this machinery, Mr. Colt has stated that the trustees have been guided by the advice of the members of the Fund's Advisory Council, which includes university presidents, representatives of the American Medical Association and the Association of American Medical Colleges, and medical directors of several leading philanthropic foundations.

Mr. Ernest T. Weir, of Weirton and Pittsburgh, chairman of the Board of the National Steel Corporation, is a member of the Board of Trustees of the National Fund for Medical Education.

TB SECRETARIES ORGANIZE CONFERENCE

The West Virginia Conference of Tuberculosis Secretaries was organized during the annual meeting of the State Tuberculosis and Health Association, at Morgantown, September 12-13. Mrs. Eleanor Cordray, executive secretary of the Monongalia County chapter, was named president, and Mrs. Myrtle Clinebell, of Fayetteville, vice president. Mrs. Marian Keener, of Fairmont, was elected secretary.

The first meeting of the new conference will be held October 26 at Charleston.

Look not sorrowfully into the past; it comes not back again. Wisely improve the present; it is thine. Go forth to meet the shadow future without fear, and with a manly heart.—Henry W. Longfellow.

WEST VIRGINIA GP ACADEMY IN LATE SEPTEMBER MEETING AT FAIRMONT

As this issue of the Journal goes to press, a meeting is being held at Fairmont, sponsored by the West Virginia Academy of General Practice, the afternoon part of which is designed for the benefit of the lay personnel in a doctor's office.

The sessions, which are being held at the Fairmont Hotel, will open at two o'clock Sunday afternoon with an address by Mr. Joseph Sheridan, of the Chesapeake and Potomac Telephone Company of West Virginia, whose subject will be "The Voice With A Smile." He will be followed by Mr. Clayton L. Scroggins, of Cincinnati, who will speak on "Office Management and Tax Problems." An open forum will follow the presentation of these two papers.

At four o'clock, Wyeth, Inc., will present a film showing the activities of the American Academy of General Practice at the last annual convention. A social hour is scheduled for five o'clock, to be followed by dinner at six o'clock.

Following the dinner, the doctors who attend the meeting will hear the guest speakers, Dr. H. S. Van Ordstrand and Dr. Donald B. Effler, of the Cleveland Clinic, who will discuss "Medical and Surgical Team Work in Diagnosis and Management of Solitary and Diffuse Lesions of the Chest."

At the same time, the wives, nurses, and secretaries present will be guests at a style show which will be presented by Jones, Inc., of Fairmont.

The members of the Woman's Auxiliary to the Marion County Medical Society will be hostesses at the meeting.

PSYCHIATRIC SOCIAL WORKER NAMED

Mr. Leon Stanley, who has lately been connected with the Alabama division of mental health, has been appointed senior psychiatric social worker for the bureau of mental hygiene, state department of health. The appointment was made by Dr. N. H. Dyer, state director of health.

Mr. Stanley served for two years as executive psychiatric social worker with the mental hygiene clinic at Charlotte, North Carolina, and he has had social work experience at the State Hospital in Mendocino, California.

Mr. Edgar Perretz, chief psychiatric social worker for the bureau of mental hygiene, has resigned to accept appointment as director of the psyhciatric social service of the Columbus Receiving Hospital, Ohio State University Medical Center. He will also serve as a member of the faculty of the School of Social Work at Ohio State.

MASON DOCTOR WITH ARMED FORCES

Dr. C. W. Thompson, of Point Pleasant, has been called to active service in the Medical Corps of the Army and will leave for Fort San Houston, Texas, on October 8, 1951. He will be located temporarily at the Medical Field Service School, Brooke Army Medical Center, at Fort San Houston.

DUKE UNIVERSITY DOCTORS TO DISCUSS PEPTIC ULCER AT CHARLESTON MEETING

Plans have been completed for the symposium on peptic ulcer, sponsored by Kanawha Medical Society, which will be held at the Daniel Boone Hotel, in Charleston, October 3, 1951. The meeting will be opened at 1:30 P. M., and adjournment will be had by nine o'clock.

The program will be presented by Drs. Keith S. Grimson, Robert J. Reeves, Wayne R. Rundles and James P. Hendrix, all of Duke University School of Medicine.

The registration fee will be $5.00, including dinner which will be served at 6:30 o'clock. Doctors who expect to attend the symposium are requested to notify Dr. A. B. C. Ellison, Atlas Building, Charleston. If room reservations are desired, doctors are requested to get in touch personally with the management of the hotel of their choice in Charleston.

All West Virginia physicians as well as those practicing in adjoining and adjacent states are invited to attend the meeting.

SEMINAR ON NEOPLASAMS OF THE MOUTH

Dr. Hamilton B. Robinson, of Columbus, professor of oral pathology at Ohio State University, will be the guest speaker at a meeting of the Mingo County Dental Society at the Mountaineer hotel, in Williamson, Thursday, October 11. All doctors and dentists in Mingo, Logan, and Cabell counties, West Virginia, and Pike county, Kentucky, have been invited to attend. In addition, a general invitation to attend the meeting has been extended to doctors and dentists generally who practice in West Virginia and Kentucky.

Doctor Robinson, who is an internationally known oral pathologist, will conduct a seminar on "Neoplasms of the Mouth." His address will follow a subscription dinner, which will be served at seven o'clock. Registration will open at 6:30 o'clock, and doctors who expect to attend are requested to notify E. T. Drake, M. D., Secretary of the Mingo County Medical Society, Box 849, Williamson, West Virginia. Those who expect to remain overnight are requested to make room reservations directly with the management of the Mountaineer hotel.

AMA CLINICAL SESSION AT LOS ANGELES

The theme of the 1951 clinical session of the American Medical Association at Los Angeles, California, December 4-7, will be postgraduate study primarily designed for the general practitioner.

The four-day scientific program will include discussions on urology; general practice; general surgery; cardiovascular diseases; industrial medicine and surgery; diseases of the eye, ear, nose, throat and chest; and neuropsychiatry.

The program will also include discussions on radiology, anesthesia, pathology, gynecology, dermatology, internal medicine and pediatrics.

The scientific and technical exhibits will be set up in the Shrine Convention Hall, adjacent to the Al Malaikah Temple, where scientific sessions will be held.

A VACATION—DOCTOR?

Some of us take a business holiday, we visit clinics, take special courses, and investigate new methods. The lectures we attend may not furnish new ideas. They may simply resurrect old ones almost forgotten; but, they do stimulate us and they do encourage us in the constantly needed pursuance of knowledge. They give us a feeling of the satisfaction that follows the confirmation of our own opinions by others. We gain in assurance, and are suddenly aware of the practical worth of Emerson's sage advice, "Trust thyself—every heart vibrates to that iron string."

There is undisputed value in this sort of "time off," but to recondition ourselves properly we need more than this freshening of professional attitudes. We need to consider ourselves as persons and human beings. We enjoy the escape from the telephone, and the meetings with old friends which we weave around the professional brushing up we do while "on vacation," or perhaps we had better say while "off duty." But we should add to this at least a short period during which we revive ourselves as personalities. Doctor, what gives you the greatest sense of rest?—What gives you a lift in spirit?—Set aside a bit of your vacation to supply these urgent needs of yourself and it will add years of your life and excellence to your service.

Where is the time to take such a vacation? Medical men should help each other to attain it comfortably. The responsibility of the doctor for his patients' welfare necessitates proper arrangement for their care, in order that he may leave his work with mental ease. The association of two or more men in a group facilitates the taking of a vacation. Older men would profit by having younger men associated with them, and their is mutual benefit from this kind of a partnership. The younger man can learn much of the art of medicine from an older associate, and his wisdom and experience are steadying. The younger man, in turn, contributes new ideas and methods and inspires the best efforts of the older doctor who has the "know how" of long years of service.—D. A. Gregory, M. D., in South Dakota J. Medicine and Pharmacy.

DR. O. J. LOWY HEADS STATE PATHOLOGISTS

Dr. Otto Joseph Lowy, Charleston pathologist, was elected president of the Association of Pathologists of West Virginia at a meeting held in Charleston September 14-15. Dr. Melvin L. Hobbs, of Morgantown, was reelected secretary.

Doctor Lowy succeeds Dr. Siegfried Werthammer, of Huntington, who has served as president during the past year.

PRACTICE OF PREVENTIVE MEDICINE

The methods of medical study applied to groups of persons and to environmental conditions, and the procedures which have been employed in the appraisal of environmental factors which contribute to human health and disease, are known to some degree by the modern student of medicine, but are not generally represented in the armamentarium of the practicing physician. So concerned has the latter been with illness and injury and with the proper care of the sick and injured, that he has generally ignored, when he has not resented, the practice of preventive medicine.

It is not surprising, therefore, that the efforts of the practicing physician have been confined largely to the curative aspects of industrial medicine, or as it has been called so often and so significantly, industrial surgery. Such a limitation of vision and interest is, however, a most unfortunate situation in an industrial society, as it has been in earlier periods and still is in a society that has continued to congregate in communities of ever-growing size and complexity.—Robert A. Kehoe, M. D., in Industrial Medicine and Surgery.

NEUROSIS AN ILLNESS

Disabling illness without demonstrable organic cause has been an irksome problem to physicians for twenty-five centuries. Emotions produce bodily change and long-continued emotional stress may produce changes which are irreversible. Psychosomatic medicine is the simultaneous study and treatment of the mutual interrelation of psychological and somatic factors. Recent emphasis on study of neurotic illness having somatic components (psychosomatic illness) has led to an oversimplification of an intricate problem.

Traditionally mental illness has been linked with demonology. The torch and the whip are remembered as psychotherapeutic agents of the Middle Ages. Today some professional and lay concepts of the neuroses still retain remnants of these beliefs.

A major misconception regarding the neurotic patient is that he is a self-indulgent, undisciplined and rather foolish person who enjoys all manner of imaginary illnesses. His frequent change of physicians is usually preceded by warnings and alarms as one colleague tells the other of his approach. Once stamped as a neurotic he is indelibly marked. He is received with impatience—often with contempt. General hospitals seldom have a bed for him. He is as a pariah of medicine.

A neurosis is an illness. To those who claim that neurotic illness is an evidence of weakness, I suggest that they tell it to the Marines—in particular those Marines who broke finally under battle strain at Guadalcanal.—John F. Williams, M.D., in Southern Medicine & Surgery.

CONTINUITY ESSENTIAL IN TREATMENT

Doctors spend an increasing amount of time seeing new patients and such time is largely wasted if the patient does not continue to be seen by the same physician. Patients who complain of lack of understanding have often failed to provide its chief essential, which is continuity. While the absence of this feature of sound medicine is frustrating to the busy physician, it is even more costly to the patient in time, money, and in delayed treatment.

If this is so with specialists it is much more so with the general practitioner, whose judgment and advice are largely governed by the picture he gradually forms of the patient, his family, his surroundings, his needs, and, in sort, his wholeness. The physician has not only a right but an obligation to discourage migratory habits of patients.—Jan Stevenson, M. D., in GP.

HEART ASSOCIATION IN ANNUAL MEETING

Dr. Louis N. Katz, of Chicago, president of the American Heart Association, will open the scientific session at the annual meeting of the West Virginia Heart Association, at Morgantown, October 5. He will discuss "The Dynamics of Pulmonary Embolism."

Dr. Robert Taylor, of the Cleveland Clinic, will follow Doctor Katz on the program. His subject will be "Electrolyte and Fluid Balance."

The one-day meeting is scheduled to open at 2:30 P. M. at the Hotel Morgan, and new officers will be elected following the scientific session. The annual dinner is scheduled for seven o'clock.

FROZEN ORANGE JUICE

Introduced only four years ago, frozen concentrated orange juice now accounts for approximately 35 per cent of all frozen food sales, exclusive of ice cream, according to the Council on Foods and Nutrition of the American Medical Association. In a report in the Journal of the American Medical Association 146:35, 1951), the Council holds "that frozen concentrated orange juice made from properly selected and prepared fruit is a dependable source of vitamin C and that it may be useful in the diets of persons of all ages."

Referring to evidence that "the frozen concentrated product can be as valuable from the standpoint of its nutritive content as is fresh orange juice", the report states that "it may be considered as the nutritive equal of fresh orange juice", meeting "the need for vitamin C intake in the diets of all persons, including infants."

During the rise in use of frozen concentrated orange juice, numerous studies of its vitamin C retention were made. One of the more recent by W A. Krehl and George R. Cowgill of the Yale Nutrition Laboratory, New Haven, Conn., was based on an assay of fresh and processed citrus juices from plants in the Florida citrus belt. Krehl and Cowgill reported in Food Research (15:179-191, 1950) that total ascorbic acid content of fresh orange juice from three plants ranged from 40.8 to 49.5 mg. 100 ml., while 42° Brix frozen concentrated juices from the same plants showed a range of 42.5 to 46.8. This was described as "excellent retention."

Incidentally, the Yale study notes the "abundance of inositol" in citrus products. "Although the nutritional significance of inositol has not as yet been elucidated," the report comments, "this occurrance of inositol as an integral part of a phosphatide, Woolley, (1944), and of an important enzyme, pancreatic amylase, Williams, Schlenk, and Eppright (1944), makes it clear this compound is a potentially important dietary factor."

SOUTHERN MEDICAL AT DALLAS, NOV. 5-8

The program for the 45th annual meeting of the Southern Medical Association at Dallas, Texas, November 5-8, has been completed. The schedule calls for the opening assembly on Monday, November 5, at 10:30 A. M.

The 21 sections of the Association will have 47 sessions beginning Monday afternoon and ending on Thursday.

The annual dinner is scheduled for Wednesday evening, November 7, with Dr. Curtice Rosser, of Dallas, president of the Southern Medical Association, as the guest speaker. Dinners and luncheons of sections, alumni associations and fraternities will be held on the first three days of the meeting.

Dr. Robert J. Wilkinson, of Huntington, who was named president elect at the annual meeting in 1950, will be installed as president at the Dallas meeting. Many West Virginia members of Southern Medical are planning to attend this annual meeting.

Hotel reservations are being handled by a housing bureau, and inquiries should be addressed to Housing Bureau, Southern Medical Association Meeting, 433 Medical Arts Building, Dallas 1, Texas.

ANNUAL MEETING NSCCA IN CHICAGO

The vital role of the crippled in the national defense effort will share the spotlight with advances in treatment and training of crippled children at the annual convention of the National Society for Crippled Children and Adults at the Palmer House in Chicago, October 3-5. Nationally known authorities in both fields will appear as speakers on the program.

Dr. Theodore G. Klumpp, president of Winthrop-Stearns, Inc., and chairman of the President's newly formed task force to mobilize the handicapped for defense employment, will discuss the role of industry and management in the employment of the crippled.

An actual clinic demonstration of handicapped workers in industry will be conducted by Dr. George G. Deaver, past president of the American Academy for Cerebral Palsy.

The program will also include addresses by Mary Switzer, of Washington, D. C., Director of the U. S. Office of Vocational Rehabilitation, and Henry Viscardi, of New York City, Executive Director of the "Just One Break for the Disabled" committee.

A special feature of the convention will be a series of seminars covering the subjects of diagnosis of cerebral palsy in the young adult, daily living activities for the crippled child, physical, occupational and speech therapy, social and emotional problems, and special education.

More than 2,000 professional and voluntary workers serving the nation's crippled are expected to attend the convention, which will have as its theme "Voluntary Effort—National Strength."

MLB TO MEET OCTOBER 1-3

The fall meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, October 1-3. It is expected that between 35 and 40 applicants for licensure to practice in West Virginia will appear for examination.

LIBRARY OF THE

PAUL M. LOWTHER REELECTED HEAD OF TB AND HEALTH ASSOCIATION

Mr. Paul M. Lowther, of Clarksburg, was reelected president of the West Virginia Tuberculosis and Health Association at the annual meeting at Morgantown, September 12-13. The vice president, Dr. Karl J. Myers, of Philippi, and the treasurer, Mr. R. C. Hawkins, of Charleston, were also reelected.

Dr. Leo H. Mynes, of Charleston, was named secretary to succeed Dr. H. H. Howell, of Madison, who was not eligible for reelection.

The following executive committee was named to serve during the ensuing year: Dr. W. P. Bittinger, Summerlee; Dr. W. L. Cooke, Charleston; Mrs. L. J. Miller, Wheeling; Rev. Winton R. Houck, Charleston; and Mrs. Viola Wagner, Parkersburg.

Dr. John N. Wilson, of Washington, D. C., assistant chief of the tuberculosis division of the Veterans Administration, was the guest speaker at the annual dinner. He discussed "Hospitalization of Tuberculous Veterans," stating that there are not sufficient beds available to take care of all former servicemen who are seeking treatment for tuberculosis. He estimated that the Veterans Administration will need 18,000 beds for use in the tuberculosis program by the year 1960.

PROGRAM COMPLETED FOR APHA MEETING

The 79th annual meeting of the American Public Health Association will be held at San Francisco October 29-November 2, 1951. Sessions will be held in the Civic Auditorium and the Palace and Whitcomb hotels. Over 15 guest speakers from foreign countries will be represented on the program, including Dr. Brock Chisholm, director general of the World Health Organization, Geneva, Switzerland.

Plans for the formation of a United States National Citizens Committee for the World Health Organization will be announced during the meeting.

The Association is the professional society of more than 12,000 men and women engaged in public health work in the United States, Canada, Mexico and Cuba, and the annual meeting constitutes the largest assembly of public health workers in the world. More than 400 speakers and discussants will participate in the sessions, workships and panel discussions.

DR. HUGH H. HUSSEY NEW EDITOR OF GP

Dr. Walter C. Alvarez has resigned as editor of GP, the official organ of the American Academy of General Practice, but will continue to serve as a member of the editorial staff in the position of associate editor. Dr. Hugh H. Hussey, the associate editor, has been appointed as his successor.

Doctor Hussey is associate professor of medicine at Georgetown University, Washington, D. C. He has for some years served as associate editor of the Medical Annals of the District of Columbia.

According to Mac F. Cahal, managing editor of GP, Doctor Alvarez will accept the position as editor of Modern Medicine, writing occasional editorials and serving in a consulting capacity. He will continue his practice of medicine in Chicago.

HOSPITAL WORK PROGRESSING

Applications for controlled materials in the construction, addition and renovation of hospitals are far in excess of allotments by the defense production administration to the federal security agency, USPHS, according to information relayed by Surgeon General L. A. Scheels to Dr. N. H. Dyer, state director of health.

The state department of health, in an effort to assure equitable distribution of these vital materials, will review and evaluate the relative importance of requests and forward applications, with full information, to the USPHS for technical review and final disposition. Proper application forms may be obtained from the State Department of Health, Charleston.

It is not compulsory that application for materials be filed, but it is hoped that in this way the need for hospital facilities will be recognized so that there may be no undue delay in obtaining permission to begin construction because needed materials are not on the market.

The program applies to all hospital construction, both privately owned and including projects using federal aid. In addition to construction for which federal aid is now being used in West Virginia, work is in progress on the following privately owned institutions: Salvation Army, Charleston General, St. Francis, and Staats Hospitals, Charleston; St. Mary's Hospital, Huntington; Raleigh General Hospital, Beckley; Elizabeth Coplin Leonard Memorial Hospital, Buckhannon; Monongalia General Hospital, Morgantown; Myers Clinic Hospital, Philippi; Herbert J. Thomas Memorial Hospital, South Charleston; Gordon Memorial Hospital, Inc., Spencer; and Wheeling Hospital, Wheeling.

DR. ALTON OCHSNER TO HEAD ACS

The 37th Clinical Congress of the American College of Surgeons will be held November 5-9 at San Francisco conjointly with the 30th annual ACS Hospital Standardization Conference. Clinics, demonstrations, and postgraduate courses will be held during the meetings at 26 different hospitals in San Francisco and East Bay communities. In addition, Letterman Army Hospital surgeons have scheduled a series of operative clinics which will be telecast in color to the Civic Auditorium.

Dr. Henry W. Cave, of New York City, president of the ACS, will preside at the general assembly on the opening morning. During the meeting, Dr. Alton Ochsner, of New Orleans, will be installed as president of the College. Other officers to be installed include Dr. Thomas H. Lanman, of Boston, first vice president, and Dr. Joel W. Baker, of Seattle, second vice president.

At the convocation on the evening of November 9, over 900 initiates will be received into Fellowship, and the Fellowship address will be given by Dr. J. Roscoe Miller, of Evanston, Illinois, president of Northwestern University.

1952 STATE HEALTH CONFERENCE

The 28th Annual State Health Conference will be held at the Daniel Boone Hotel in Charleston, May 8-10, 1952.

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Vol. XLVII NOVEMBER No. 10

DIAGNOSIS AND TREATMENT OF DIABETIC ACIDOSIS*†

By ARTHUR R. COLWELL, M. D.
Chicago, Illinois

Not many conditions encountered in medical practice are so often misunderstood and treated as undiscriminatingly as diabetic acidosis. It will be my purpose to try to clarify the clinical picture of this condition as it runs its course and to outline and correlate the detail of its effective management at various stages. The rewards of a good understanding of its diagnosis and treatment at various stages of its development are great.

"Diabetic acidosis" is that condition which occurs as a result of the formation of ketones in excess amounts because of inadequate utilization of sugar in uncontrolled diabetes. The readily identifiable ketones are acetone and diacetic acid in the urine. If formed in excess over a considerable period of time they result in depletion of the alkali reserve, measured as a reduction in the carbon dioxide combining power of the blood plasma, normally about 60 volumes per cent. Severe acidosis occurs in diabetes only when poor control has been present for some time. Therefore, it is practically always accompanied by heavy glycosuria and very high blood sugar levels. If glycosuria and ketonuria are intense and prolonged, diuresis and extreme dehydration are consequential. Diabetic acidosis most often occurs in severe diabetes, is most common in young people, frequently is caused by withdrawal of insulin or previous inadequate use of it, and may be precipitated by a variety of complications, most frequent of which are acute infections of all types. In its most severe form it is known as diabetic coma, but asyomptomatic and precomatose states always precede this late stage. Many forms of coma that occur in diabetics are not true diabetic coma at all. They must not be mistaken for it nor treatment so directed, or the results may be disastrous. True diabetic coma is relatively easy to recognize and possible to reverse at the wish of the physician. Precomatose states and asymptomatic acidosis in diabetes are even more simple to recognize and correct.

DIAGNOSIS

The diagram in figure 1 gives a fairly clear picture of the average course of diabetic acidosis as it alters normal conditions to cause eventually the death of the patient. Clinical findings develop roughly parallel to the loss of alkali as measured by the plasma carbon dioxide combining power. Some of the clinical features are due to the acidosis, some to the accompanying glycosuria, and the dehydration to both.

The curve shows the plasma carbon dioxide level falling from normal to a level less than 10 volumes per cent, where death occurs. The loss of alkali thus measured is caused by the formation of organic acids in large amounts, due to inadequate utilization of sugar in the body, due in turn to available insulin less than the need for it. The rate at which it falls is determined by the intensity of these factors. If uncorrected, acidosis may run its course within hours (as after insulin withdrawal from a total diabetic) but more often requires days or even weeks to progress from a mild to a severe form. This fact often makes the diagnosis easy, as distinct from causes of sudden unconsciousness in diabetes such as injury, sedatives or cerebral accidents.

*From the Department of Medicine, Northwestern University Medical School, Chicago.

†Presented before the 84th Annual Meeting of the West Virginia State Medical Association at White Sulphur Springs, July 20, 1951.

During the early stages of development there are no symptoms. The condition is recognizable only by chemical tests of the blood and urine, the simplest of which are the tests for acetone and diacetic acid in the urine. In this respect, as in others, loss of alkali by acid formation and excretion in the urine is strikingly similar to loss of hemoglobin in bleeding from the digestive or genito-urinary tract. Correction in the earlier stages is easy, there is plenty of time to act, and the patient does not suffer much. Diagnosis and treatment are relatively simple measures if one inviolable rule is observed: Every diabetic showing heavy glycosuria should be tested promptly for ketonuria, even though he feels perfectly well, and ketonuria should be stopped promptly with extra insulin before it leads to precomatose and

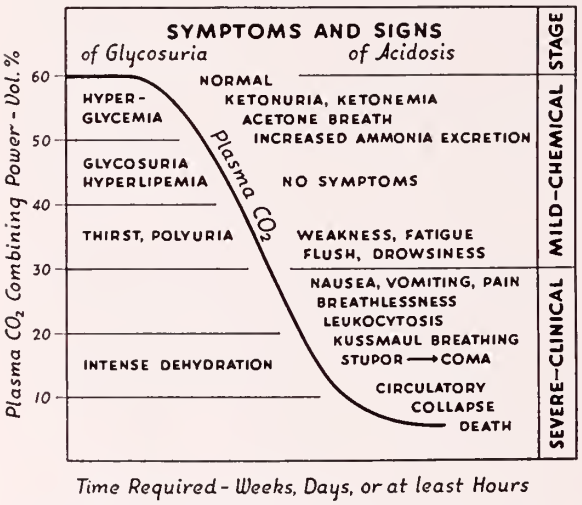

Fig. 1. Course of diabetic acidosis as related to depletion of the blood plasma carbon dioxide combining power.

comatose stages of acidosis. The early, mild, chemical, asymptomatic stage of diabetic acidosis should be borne in mind in considering treatment, because the best methods used to correct it vary considerably in detail although not in principle from those necessary for the reversal of precoma and coma in diabetes.

As in the case of hemorrhage and fall in blood hemoglobin values, when the alkali reserve falls below the half-way mark, approximately, characteristic symptoms and signs appear. Experience permits a good estimate as to the plasma carbon dioxide combining level according to the nature and severity of the symptoms. Weakness and drowsiness appear early and become more pronounced as the acidosis develops. Among the most reliable early signs are nausea and vomiting. These symptoms usually warn of an impending severe acidosis and should always prompt testing for sugar and ketones in the urine when they appear in a known diabetic. Severe pain in the abdomen is common, and often is accompanied by rigidity. Leukocytosis usually reaches levels of 20,000, sometimes 30,000 and, occasionally, 40,000 cells per cu. mm. The simultaneous appearance of vomiting, pain, rigidity and high leukocytosis is easy to mistake for acute surgical abdominal pathology. The only safe rule to apply in ruling it out is to correct the acidosis, if present, and appraise the findings afterward. Most often they are corrected by control of the acidosis. Furthermore, it is hazardous to perform surgery in the presence of severe acidosis.

Except for the blood findings, breathlessness probably is the most dependable sign of severe acidosis. Early, it appears only with effort or in talking, but when the alkali reserve approaches and falls below 20, it becomes a true air hunger, as described by Kussmaul, and causes extreme distress and apprehension. The flush of the skin and ears and the red color of the venous blood due to oxygen saturation are in striking contrast to the cyanosis accompanying most other forms of extreme dyspnea. Intense dehydration, shown by soft eyeballs, extreme thirst, poor tissue turgor and dry, beefy tongue, uniformly accompanies severe acidosis at these later stages.

When the plasma carbon dioxide falls below 10 volumes per cent the patient becomes moribund. The Kussmaul breathing becomes shallow and rapid, cyanosis replaces the flush, the blood pressure falls, the pulse becomes more rapid and thready, and the previous diuresis stops and oliguria or anuria develops. It is at this stage of circulatory failure that complete coma is seen. Too often the acidosis is irreversible at this stage unless circulatory competence and excretory function can be reestablished. This is the stage of diabetic coma. All that precedes it is easily recognizable, even from a history, and much more easily reversible by treatment. True diabetic coma is only the result of negligence on the part of the patient or his family or physician. It should not be permitted to occur. If it does, it should not be confused with coma due to other causes.

Diagnosis of diabetic acidosis at any of the stages described, then, is determined by some idea of the clinical symptoms and signs as just described, by the presence of ketones and sugar in the urine, high blood sugar levels and low blood plasma carbon dioxide combining power. Other forms of coma in diabetes are identified by the absence of these findings and the presence of others. Diabetic coma and precoma and chemical acidosis usually will respond dramatically to appropriate measures to be described. Coma not due to acidosis in diabetics, if treated as acidosis, not only will not respond to specific therapy but often will result in a fatal outcome if large doses of insulin are used indiscriminately. It is on this account that accurate diagnosis is emphasized as

a required preliminary to treatment. Furthermore, estimation of the severity or stage of acidosis is a valuable aid to treatment because it determines the vigor of the treatment and the probable outcome.

TREATMENT

Mild forms of diabetic acidosis in which no symptoms but rather only glycosuria, ketonuria, hyperglycemia and modest reduction in alkali reserve exist, can be corrected quickly by the use of a six-hour emergency program. This method is also useful before and after surgery and in acute infection. By this technic (demonstrated graphically in figure 2) the 24 hour day is divided into four equal parts of six hours each. Every six hours about 40 gm. of carbohydrate are given. It may be fed in the form of two glasses of orange juice or ginger ale, three glasses of milk, a small meal, or injected as 800 cc. of 5 per cent glucose intravenously. The food supply may then be ignored as a possible variable affecting the sugar levels. Every six hours a dose of regular insulin is injected, initially from 10 to 20 units in mild acidosis when no symptoms exist. Subsequent dosage is judged by the urinary sugar resulting from previous dosage. The objective is to give just enough insulin every six hours, night and day, in overlapping effect, to keep the urine approximately sugar free and not cause any insulin reactions when about 40 gm. of carbohydrate are taken along with each dose.

By the use of this technic it is almost always possible to stop glycosuria and ketonuria within twenty-four hours or so, as well as control glycosuria preoperatively and postoperatively and during acute infection.

In the treatment of *severe acidosis* use is made of the same principles of treatment; however, insulin dosages are necessarily much larger, more frequent dosage may be needed in the beginning, fluid requirements are much more important, salts must be replaced and circulatory failure may demand special care. Each of these therapeutic weapons should be discussed individually.

Insulin.—Only regular or crystalline insulin should be used. Depot insulins are of little value in the correction of severe acidosis although they should be continued if used previously. If not, it is wise not to start using one of them for fear of confusing the effects of the vitally important quick-acting hormone.

The size of the initial dose of insulin should be determined by the condition of the patient. A good rule is to give at least one unit per kilogram of body weight initially if vomiting, drowsiness and any breathlessness are present. Forty to eighty units, at least, would then be given. Much more may be required. If the patient is desperately ill, if less insulin has failed to accomplish anything, if virulent infection co-exists, or if any signs of circulatory collapse are present, from 100 to 400 units may be given, depending on the gravity of the situation. When the blood pressure is down and the dosage selected is large, it is wise to give a substantial part of the insulin by vein to insure distribution, and the rest hypodermically.

Second in importance only to good judgment concerning the size of the initial large dose of insulin is an intelligent appraisal of its effect. This is best judged about four hours after administration. The effect on the symptoms existing originally provides the quickest measure of its action. Nausea, vomiting and particularly breathlessness are dramatically improved at about four

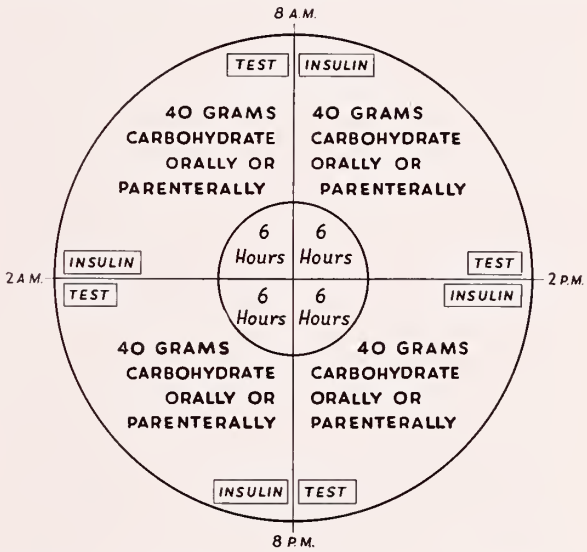

Fig. 2. Six hour emergency progrom for control of diabetic acidosis. Only regulor insulin should be used.

hours if enough insulin has been given initially. If no improvement is seen in four hours, more insulin should be given, at least twice as much as in the first dose, and the patient watched carefully at the critical four-hour point as before.

An early and valuable sign of effective insulin action is a sharp drop in the diuresis previously present. Urinary volumes measured hour by hour by catheter in the early stages of treatment tell an accurate story, as a rule, of the intensity of insulin action because they reflect sharp reductions in the amount of sugar excreted before any change in the qualitative tests is seen. Both the symptoms and the urinary volume provide information more quickly than blood sugar reports and are preferable for judging insulin effects early in the treatment of severe acidosis.

As soon as favorable signs of good insulin effect are seen in relief of symptoms and control of

diuresis, it is wise to give subsequent insulin only at six-hour intervals, both day and night. Dosage is modified cautiously, the size of each subsequent six-hour dose judged by the effect of that given previously. Massive dosage can be dangerous if continued beyond the point of clearing glycosuria and ketonuria. It is likewise true, however, that reduction of insulin dosage too rapidly, especially if ketones are still present in the urine, can be equally dangerous.

Glucose.—I am firmly convinced that glucose should not be given as long as heavy glycosuria persists. To supersaturate a patient already saturated with glucose serves no useful purpose. It does do real harm in intensifying and perpetuating existing diuresis from glucose, thereby preventing rehydration of a dehydrated individual. The unnecessarily prolonged diuresis may also cause dangerous loss of sodium, potassium and phosphorus. It has been twelve years since our last death from diabetic acidosis. We have uniformly given no glucose to cover our initial large doses of insulin.

The success of this routine depends on two important factors. First, one must not hesitate to give just as much insulin as if he were covering it with glucose. Second, he can feel perfectly secure in doing so provided he is watching the urinary sugar closely for signs of clearing. Hourly testing of urine obtained by indwelling catheter is an essential feature of this technic. As long as heavy glycosuria continues there is no danger of shock. Clearing of urinary sugar usually can be anticipated by a sudden fall in the hourly volume of urine which is a good indication for starting glucose intravenously. Glycosuria should then be encouraged until massive doses of insulin can be lowered cautiously. Parenteral glucose can be replaced by feedings of about 40 gm. carbohydrate value every six hours by mouth as soon as the alimentary capacity of the patient permits.

Fluids.—The need for fluids in severe diabetic acidosis is exceeded only by the need for insulin. The extreme degree of dehydration always present demands large amounts of fluids promptly.

If any degree of circulatory shock is present it is wise to give a pint or more of blood plasma as the initial supply of fluids. Thereafter it is our custom to give one or two liters of sixth-molar sodium lactate intravenously, rather than glucose, up to the point that heavy glycosuria and polyuria start to respond to the large doses of insulin. This provides 18 to 36 gm. of alkali immediately. As soon as the need for glucose is seen in a reduction of the urinary volume and sugar, glucose-Ringer's solution should be used instead.

All in all, from three to six liters of fluid should be given during the first twenty-four hours. Practically all of it must be given by vein because of the vomiting and danger of dilatation of the stomach if given by mouth. Indeed, it is wise to aspirate the stomach at this stage, washing it with a moderate amount of sodium bicarbonate solution. The oral route should not be used until all signs of nausea have abated.

Electrolytes.—Depletion of sodium and potassium, particularly, must be recognized and corrected. An adequate supply of sodium is insured by the routine administration of sodium lactate early and sodium chloride or Ringer's solution later. Within the past few years the importance of potassium depletion has been revealed by a good many careful studies of blood potassium levels during treatment. Strangely enough, these usually are normal and may even be high at the time treatment is started but usually fall rapidly as insulin effect becomes apparent and glycosuria is reduced. The greatest danger from hypopotassemia comes from four hours to a day or so after treatment is begun. It may be fatal if unrecognized and untreated. Its clinical signs are those of extreme muscular weakness, most easily recognized as a "fish-mouth respiration," and myocardial weakness, not otherwise explained, with extremely low T waves. It responds dramatically to 4 to 8 gm. of a potassium salt, given slowly by vein. If given too rapidly potassium can cause sudden death, of course, so most observers now agree that the small amounts present in Ringer's solution are sufficient for routine use in prevention and that more should be used only when there are clear-cut signs of danger from hypopotassemia.

SUMMARY

1. Diabetic acidosis is a distinctive condition which can be recognized easily and corrected without too much difficulty if it has not progressed to a terminal state.

2. It is caused by anything that reduces utilization of sugar to a sufficient degree, most frequently inadequate insulin and acute infection.

3. In its milder forms it causes no symptoms but is characterized in the diabetic by sugar and ketones in the urine. At this stage it is easily corrected by frequent supplementary injections of insulin.

4. In its severe form vomiting, breathlessness, progressive stupor and dehydration are characteristic. Much larger amounts of insulin are then required for correction, along with adequate amounts of water and salts, especially sodium and potassium.

5. Diabetic coma due to acidosis is a late manifestation with distinctive findings preceding and accompanying it. Other forms of coma in diabetic patients must not be mistaken for diabetic coma nor should their treatment be so directed.

SURGICAL COMPLICATIONS OF DIABETES MELLITUS*†

By ARTHUR R. COLWELL, M. D.
Chicago, Illinois

Experience proves that surgery can be done in the case of the patient with diabetes as safely as in that of the nondiabetic if he is otherwise in a comparable state of health. Insulin has made this possible. The prevailing fear of surgical procedures in diabetic patients is based on three conceptions, all but one of them unwarranted by the facts.

First, the high morbidity and mortality rates preceding the discovery and use of insulin still influence our thinking and are reflected in textbook coverage of this subject. This is unnecessary now, after thirty years of use of the specific hormone which, when used properly, can provide good nutrition preoperatively and correct completely the disorder of metabolism preoperatively and postoperatively. It represents a holdover prejudice which, experience has demonstrated beyond doubt, can be abandoned. Second, for a somewhat similar reason, this old prejudice is kept alive because all too often diabetic patients still have trouble after trauma and surgery, particularly from infectious complications. Too often this is due to the fact that insulin is not used properly. Safety after surgical and accidental trauma in the diabetic is determined largely by good control of the diabetes, both in preparation for operation and in management afterwards. When the proper use of insulin is appreciated and sufficient care is taken, results are as good as if diabetes were not present, with one exception, to be mentioned now.

The third reason for the fear associated with surgery in the case of the diabetic is the prevalence of advanced and premature vascular disease in diabetes. This has not been influenced to any great extent by the discovery and intelligent use of insulin. It constitutes a real hazard and must be respected as a source of trouble, even with good control, particularly in diabetics in the latter half of the life span and in surgery of the lower extremities. But even this risk is primarily that of arteriosclerosis rather than diabetes. Persons who do not have diabetes but who do have comparable degenerative changes in the arterial system have just as much difficulty with surgery, anesthesia and trauma as well controlled diabetics. Only in so far as arteriosclerosis tends to develop earlier and more rapidly in the diabetic population are diabetics greater risks for surgery. Their hazards are determined and their outlook should be judged by the condition of the arteries rather than by the presence of diabetes, provided, of course, that nutrition is good (as it can be) and that glycosuria and hyperglycemia are prevented.

The specific problems of this discussion can be best covered under various sections. These will be the role of infection in diabetic trauma and surgery, specific surgical procedures in the diabetic which have special indications for safety, choice of anesthesia, the management of diabetes before and after any surgical manipulation or anesthesia, and after injury.

INFECTION IN DIABETES

No one can deny the fact that the uncontrolled diabetic is more susceptible to infection of all kinds than the normal individual. This is most striking with reference to the skin in the incidence of furuncles and carbuncles; it is most striking in the genito-urinary tract in the form of papillary necrosis, pyelonephritis, cystitis, vulvovaginitis, urethritis and balanitis, in the respiratory tract in a variety of conditions including tuberculosis and in the lower extremities in the form of cellulitis which easily results in gangrene.

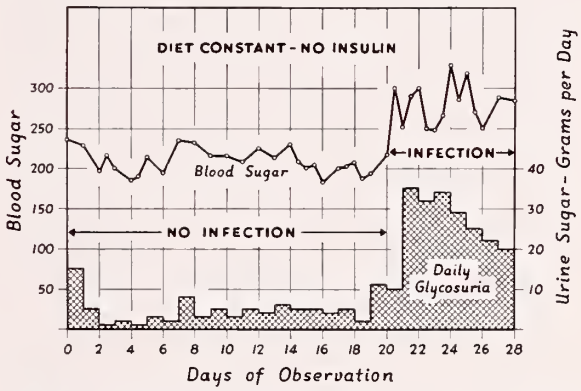

Fig. 1. Effect of infection (mild cystitis with low grade fever) on blood and urine sugar levels in a patient with diabetes mellitus.

Figure 1 shows how rapidly and profoundly acute infection (in this case acute cystitis) can increase the blood and urine sugar levels in diabetes. The vicious cycle thus initiated can (and often does) lead easily to death. The patient does not do so well with either the diabetes or the infection when they accompany each other. Each makes the other worse. Correction of the diabetic state with insulin and more insulin often is the only way to interrupt the cycle. When this is done the reverse cycle can be established.

In the maintenance of good nutrition and the prevention of excessive glycosuria with its resulting dehydration we have powerful weapons against infections in the diabetic, and the risks

*From the Department of Medicine, Northwestern University Medical School, Chicago.

†Presented before a joint meeting with West Virginia Diabetes Association, the Section on Internal Medicine, and the West Virginia Chapter of the ACP, held in connection with the 84th Annual Meeting of the West Virginia State Medical Association, at White Sulphur Springs, July 20, 1951.

from them have been greatly reduced. The relatively high incidence of infection in undernutrition and poor control through neglect is the source of a rich supply of surgical complications, particularly in the skin and the feet. But they are just as safe to treat effectively and are as preventable as in the nondiabetic provided normal nutrition and good sugar balance are maintained. This is a striking fact which is not well known by physicians who do not see many cases of diabetes or who do not treat it competently when they do. Only the limitations of poor blood supply to the feet and legs impose any real handicap on the diabetic.

The practical application of this fact is the prevention of high blood and urine sugar levels in spite of an adequate supply of food, both for prophylaxis against the common occurrence of infectious complications spontaneously in diabetics and in reducing the risk from them postoperatively and post-traumatically. The fact that this will prevent them is one of the best arguments against the use of free diets with no effort to control glycosuria. In addition to the desirability of the patient feeling well, maintaining a satisfactory body weight and not showing ketosis, infectious complications can be prevented and more easily controlled if approximately normal blood and urine sugar levels are consistently established. Infection need not occur spontaneously or after wounds more often than in normal people, provided the blood supply is normal and provided also, of course, that no nondiabetic complications such as anemia or other debilitating conditions exist.

Diabetes and the insulins used in its management present no contraindications to the use of any of the antibiotics. But in the presence of an acute allergic or toxic reaction to them, more insulin usually is required for control just as it usually is in the case of any acute illness.

SPECIAL SURGICAL PROCEDURES IN DIABETES

With few exceptions surgery in the diabetic should be conducted just as if the disease were not present. Major and minor surgical procedures can be performed by orthodox technics. The only precautions to be observed, as a rule, are those just described which insure a normal nutritional state and the prevention of infection. I know of no exceptions to this rule except the particular technics in operations on the lower extremities in the presence of deficient blood supply. Even then the precautions are necessary because of peripheral vascular disease rather than diabetes itself.

The general rule for surgery of the foot or leg is ultraconservatism. When infection of the toe, foot or leg is not accompanied by gangrene amputation usually is not indicated. Local treatment, antibiotics and control of glycosuria often yield excellent results.

I believe that warm, moist compresses are indispensable for good drainage although extreme care must be taken to avoid burns which occur much too frequently due to carelessness. These feet will not tolerate heat as well as those with normal sensation and blood supply. Warm (not hot) dressings should always be used, with sharp warnings to test carefully for excessive heat before application. If burning and maceration are avoided and provided actual gangrene is not present, infected lesions heal much more readily under this regimen than those which are allowed to dry, crust or become sealed over, probably because of adequate drainage. Even when gangrene is present the infection which almost always accompanies it is more easily controlled by good drainage from warm, moist compresses. They are much more effective than dry heat.

When deep suppuration occurs, with or without gangrene, conservative drainage should be accomplished. A good rule is to provide adequate drainage and removal of necrotic tissue and sloughs with the least possible surgical trauma. In the absence of gangrene, this maneuver, together with the other measures described, often is rewarded by the preservation of a foot or a digit. Even with gangrene it sometimes permits amputation at a lower level than would otherwise be possible, by control of ascending infection and prevention of extension of gangrene. Incision and debridement must be accomplished with a minimum of trauma to reasonably healthy tissues, however, and surgical drainage must not be attempted unless frank suppuration is present.

Gangrene practically always is accompanied by infection even when it does not appear to be. Its spread is encouraged by infection, probably due to edema and thrombosis, with further obliteration of already deficient blood supply. Likewise, infection occurs more readily in and around a gangrenous area. For these reasons, among others, the prognosis of a frankly gangrenous area is always grave and usually hopeless. The best that can be expected is, first, control of infection at the level of amputation, and then removal of the extremity at the lowest possible level consistent with probable healing of the stump.

Osteomyelitis is a common feature of infection and gangrene in the toe and foot. It should always be ruled out by x-ray in the presence of infection and gangrene. Its existence practically always requires amputation above its level of appearance.

During the last few years we have often secured good results in amputation of one or more digits and occasionally in transmetatarsal amputations as well by a special technic developed jointly with Dr. Frederick Christopher. Even in ischemic feet it often has been successful, in contrast with previous experience and ordinary failure, if three important principles are observed. First, infection must be controlled as well as possible, both before amputation at the level of transection and afterwards in the stump by the use of antibiotics, both local and general. We have uniformly packed the open wound with a water soluble vehicle known as "Carbowax" containing 5 or 6 per cent sulfonamide, protecting the skin around the wound and covering the sulfacarbowax pack with vaseline gauze to prevent irritation of healthy skin and soaking of the ointment into the dressing. We feel that this is an important adjunct to successful healing of the stump because, being water soluble, it encourages drainage from the wound and because it controls surface infection. It also appears to stimulate granulation. Second, we believe that the amputation should be accomplished with an absolute minimum of surgical trauma and that skin flaps should not be too long. Most important, finally, we believe that healing by primary intention should never be sought in amputation of a toe or a part of one. Two or three sutures should be put through the skin flaps for subsequent gradual closure but the wound should be left wide open, packed with sulfacarbowax, aiming deliberately at healing by secondary intention. A good many successful toe and foot amputations have now been accomplished by this technic which would have required high amputation or reamputation by older methods.

Extensive, deep foot necrosis and infection, osteomyelitis involving the bones of the foot or leg and uncontrolled infection involving the leg usually demand amputation above the knee. If the arterial supply is unusually good it is occasionally successful below the knee, thus preserving that joint. Primary union usually is possible at these levels unless the blood supply is exceptionally poor, infection is present at the level of amputation, excessive trauma has been present, or secondary infection of the stump occurs. We have abandoned amputation through the knee joint.

Women, older men and nonathletic individuals generally do not tolerate the use of prosthetic devices very well. Almost always to this group loss of a leg means the use of crutches or a wheel chair permanently.

Serious infections and gangrene of the hand and arm are almost nonexistent, in our experience. When infection does occur in these parts it is much less likely to cause gangrene and responds more easily to treatment than that of the foot. Gangrene in other parts of the body can occur but it is extremely rare. Infection elsewhere is dependent on poor control of diabetes and nutrition rather than deficient blood supply, as in the feet and legs. Furuncles, carbuncles, other skin infections, lymphangitis and adenitis are therefore more common but should be managed by ordinary methods along with good control. Thyroidectomy and cholecystectomy are somewhat more common because the indications for them are more common also. Urologic examinations are required more frequently among diabetics because infection is so much more prevalent, due to glycosuria, as are vulvar infections. These conditions require no unusual precautions in the diabetic except good control of glycosuria and good nutrition to which they usually respond with no surgical interference.

ANESTHESIA

The choice of anesthetic agent should be determined primarily by the surgical requirements rather than the presence of diabetes. Whereas it is true that the more toxic the agent and the more profound and prolonged the anesthesia, the more disturbance of sugar balance is the consequence, discriminating use of insulin can always correct this promptly. Therefore, the surgeon and anesthetist do not need to be handicapped by the use of an inefficient anesthetic provided safe rules for correction of glycosuria are followed at the first signs of trouble.

Probably deep general as well as prolonged anesthesia does more harm to the sugar balance of the diabetic than surgical trauma and blood loss. In the order of their tendency to do so, the commonly employed anesthetic agents stand in relation to each other about as shown in table 1.

TABLE 1

Common Anesthetic Agents in Order of Preference for Use in Diabetes Mellitus

1. Local anesthesia
2. Block and spinal anesthesia
3. Nitrous oxide
4. Sodium pentothal
5. Cyclopropane
6. Ethylene
7. Ether
8. Chloroform

Everything else being equal, those highest on the list will do the least harm to sugar utilization and will be less likely to lead to serious acidosis. Those lowest on the list will be most likely to do so. They appear to be harmful in diabetes to approximately the same extent that they cause postanesthetic symptoms such as nausea, lethargy,

tachycardia and fever. Their tendency to unbalance sugar metabolism and cause acidosis may be a direct result of liver anoxia or other mechanisms which deplete liver glycogen, thereby causing intense hyperglycemia and glycosuria quickly. But even those that do can be used, if the surgeon prefers, provided the need for additional insulin postoperatively is anticipated, is recognized promptly by blood and urinalysis, and is used promptly and effectively for safe control of glycosuria. Local, block and spinal anesthesia are always to be preferred if feasible. Usually they do not upset the diabetes.

MANAGEMENT OF DIABETES BEFORE AND AFTER OPERATION AND ANESTHESIA

Discussion so far has been directed to the surgeon and the technics preferable for him to use. Frequent reference has been made, however, to the desirability of attaining and maintaining, first, a satisfactory nutritional state and, second, relative freedom from hyperglycemia, glycosuria, dehydration and acidosis in the surgical diabetic patient. Specifically, how can this be done?

The medical management of diabetes before and after surgical interference must be considered from two standpoints, i. e., when good control exists and when it does not. Patients who are eating well and yet are free from glycosuria and marked hyperglycemia by virtue of diet adjustment with or without the routine use of depot insulins need only to be kept that way. They should eat 150 to 200 gm. of carbohydrate daily, at least one gm. of protein per kilogram of body weight (usually 60-100 gm. daily). Supplementary vitamins are desirable in addition. Food supplies in this range, if glycosuria is controlled, will keep them free from ketosis and in nitrogen balance, and will maintain adequate liver glycogen. Frequent urine testing and occasional blood sugar estimations demonstrate the safety of operation and anesthesia. If blood and urine sugar levels rise moderately after operation they are easily corrected, as a rule, by modest increases in the daily depot insulin dosage or small supplementary doses of regular insulin before the morning and evening meals.

Special technics for the use of diet and supplementary insulin are indicated, however, if marked glycosuria and hyperglycemia appear either before or immediately after operation. In principle these require more and frequent injections of regular insulin at uniform intervals, both day and night, for rapid control of high sugar levels. By intelligent application of simple technics good control ordinarily can be accomplished within twenty-four hours, insuring the safety of the surgical patient from the standpoint of diabetes.

The simplest and most effective method for doing this is known as "six-hour emergency management". It requires attention to three procedures every six hours around the clock, four times in each twenty-four hours. These are, first, the administration of suitable doses of regular insulin approximately every six hours, e.g., at 8 a. m., 2 p. m., 8 p. m. and 2 a. m.; second, a food supply of about 40 gm. glucose value during each of the six-hour periods following each insulin dose; third, a urine test four times each day to detemine the adequacy of each insulin dose given six hours previously. Figure 2 demonstrates this technic in diagrammatic form.

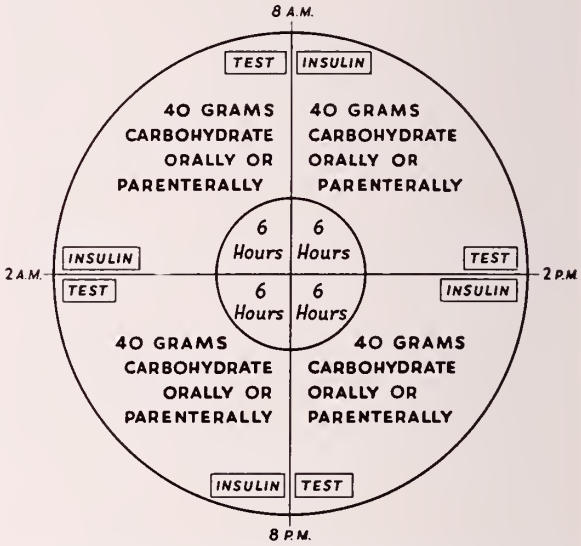

Fig. 2. Six hour emergency method for rapid control of diabetes during acute complications such as surgery, anesthesia and infection. Only regular insulin should be used.

If acidosis or severe infection does not accompany the heavy glycosuria, ordinarily 10 to 20 units of regular insulin should be used as the initial dose in this routine. If the patient is very ill, two or three times this much may be required. Some 40 gm. of carbohydrate should then be given during the next six hours. This can be given by vein as 800 cc. of 5 per cent glucose solution or by mouth in the form of orange juice or ginger ale (about 2 glasses), milk (about three glasses), or a small meal of 40 gm. glucose value, depending on the alimentary capacity of the patient. Approximately six hours after the initial dose of insulin a simple test for urine sugar is made; preferably on a short specimen obtained after emptying the bladder an hour or so previously, to reflect the immediate conditions more accurately. This test obviously will show as much sugar as was present initially, less than that, or none at all. If the glycosuria disappears

completely it is also possible for an insulin reaction to occur if the need for insulin was grossly overestimated. The second six-hour dose of insulin is determined by which of these things is accomplished by the first dose. If no improvement in glycosuria is seen, the initial dose should be increased. If improvement has occurred, it should be repeated. If the first dose has made the urine sugar free or caused a reaction, it should be reduced cautiously or radically. No six-hour dose should be omitted, however, because to do so would destroy the rhythm of overlapping of successive doses which is essential for proper interpretation of the results.

After the second dose is given, the amount having been determined by the results of the first, as just described, another feeding of about 40 gm. glucose value is given, as before, and another urine test is made six hours later to judge its effect. The size of the third dose is thus determined, another 40 gm. feeding supplied and another urine test performed six hours later, which is the basis for the fourth dose. This procedure is continued every six hours, night and day, until experience shows how much regular insulin is required, when repeated at intervals of six hours, to keep the urine approximately free from sugar without causing reactions or subnormal blood sugars, when 40 gm. of sugar are supplied during each of the six-hour periods. This dose can then be repeated for an indefinite period of time as a maintenance dose. As the postoperative reaction subsides it usually is necessary to reduce the amount gradually if the dosage is high and the urine remains sugar free.

In the application of this technic, several points deserve emphasis. When glucose is supplied by vein it must be given slowly in order not to flood the patient with sugar and spike the levels used to observe the insulin effects. When intravenous supplies are replaced by oral feedings less insulin is required, as a rule, to prevent glycosuria, and insulin reactions are more likely to occur. Regular insulin must always be used for promptness of action. If a depot insulin is in use at the time this method is started it should be continued in the same daily amounts in order not to introduce a variable factor by stopping it. In that case it can be ignored as a contributory factor although it is wise to divide the daily total into two doses given twelve hours apart to insure reasonably constant action from it at all times of day. Urine tests must be performed and reported promptly to avoid delay and inconstant overlapping effects from successive six-hour doses of regular insulin. The results of qualitative tests on short one hour or two hour specimens can be relied upon as a basis for the effects of insulin given previously provided no bladder retention is present. If bladder retention is present it will mask the current insulin effect and catheterization must be employed, most conveniently with an indwelling catheter. Blood sugars are not of much value under these emergency conditions because their results cannot be learned quickly enough to determine the immediate need for insulin. Urine findings and symptoms of insulin reactions are satisfactory immediate guides, although occasional blood sugars may help, in retrospect, to explain possible discrepancies and determine more accurate dosage. Finally, it should be reemphasized that no single six-hour dose should be omitted even if an insulin reaction has occurred, because heavy glycosuria will recur quickly, as a rule, requiring a fresh start and destroying the value of previously determined insulin needs.

Ordinarily, this method of emergency diabetic control should be continued until the postoperative reaction has subsided, until the patient can eat well again, until the daily insulin requirement is not excessive, and until the same dosage, repeated over and over again, will neither cause hypoglycemia nor permit glycosuria. A transfer to one of the depot insulins given once daily and three meals at customary intervals may then be made, using the total six-hour dosage for a full day as the basis for the larger morning dosage of the slow acting depot insulin.

The six-hour emergency method just described probably is the simplest, safest, most rational and most effective of the available methods of securing quick control of diabetes in emergencies. Other methods have been used, based on exactly the same principles of treatment, but most of them are difficult to learn and not easy to apply. The minor effort required to learn and use this one will be rewarded by safe surgery, no more complications than in nondiabetic persons, and a minimum of technical apparatus and laboratory service. We have taught the method for years to many interns, medical students, nurses and even patients. It has been applied by them thousands of times with good effect, even when they have had little experience with diabetes. When surgery, trauma, infectious complication, anesthesia or mild acidosis complicates the life of the diabetic patient, regular insulin every six hours, together with equally spaced feedings of uniform size and frequent urinalysis to determine the balance, makes the diabetic as good a surgical risk as the normal individual, provided no arteriosclerotic nor nondiabetic condition further complicates the outlook.

SUMMARY

1. Infection in diabetes mellitus can be prevented to a great extent, also more easily managed if it exists already, by good control of abnormal glycosuria and provision of an adequate food supply.

2. Special technics for the use of the surgeon often give better results than those ordinarily employed, especially in the surgical treatment of infectious and gangrenous conditions of the feet and legs.

3. Any anesthetic agent may be used safely for the diabetic individual provided there is a careful search for glycosuria and quick control of it, if it occurs, with supplementary insulin.

4. The use of a six-hour method of control of glycosuria provides a convenient, safe and rational method of controlling diabetes in emergencies.

5. When discriminating methods of managing persons with diabetes are employed intelligently, surgery is as safe for them as for others provided no vascular disease exists in an advanced form.

DIABETIC CHILDREN NEED CAMP PRIVILEGES

The diabetic child is not a medically remunerative proposition. He must be seen frequently. The chances are overwhelming that the financial return will be low although I grant that the recompense derived from contacts during treatment will be high. Few of the children can pay regular fees for the many visits which are needed. Furthermore, more than a half of the children ought to go to diabetic camps and at our camps they do not half pay their way and it is up to the physician through charitable agencies or his own friends to assure their support. If they do not have camp privileges, they do not get what will bring them or us the most satisfaction in the long run.—Elliott P. Joslin, M. D., in J. Okla. St. Med. Assn.

THE YOUNGER DIABETIC

The younger diabetic represents an exploration into the unknown. We have had four patients with onset of diabetes under 15 years of age who have died after 30 years of the disease, but to offset these there are 10 times as many, 40, who are living. Ten other cases are known to have died after 25 years of diabetes, but 18 times as many, 181, are alive. What is to happen to the 40 who are living after 30 years and to the 181 alive after 25 years of diabetes?

Here, therefore, is the opportunity for each one of us, for you and for me, to demonstrate whether our methods of treatment are sufficiently good to enable our diabetic children to penetrate unknown durations of diabetes and to pass these advanced years in health rather than in suffering. The problem is a sizable one. —Elliott P. Joslin, M. D., in J. Okla. St. Med. Assn.

INDICATIONS FOR HYSTERECTOMY

By JOHN LEE CRITES, M. D.
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Pelvic surgery is perhaps the easiest of all major surgery done today. Therefore it is not surprising that anyone who does any major surgery considers himself an expert in this field. Somehow this does not seem right to me or to thousands of women who are subjected to unnecessary female operations each year. Women are human beings and should be treated as such on the operating table. The presence of a womb and the possibility of a fee are not legitimate indications for hysterectomy.

I have no quarrel with those who conscientiously and scientifically consider each case and act accordingly. On the other hand almost any pathologist will tell you confidentially that he has a very difficult time finding some excuse for many of the hysterectomies which are done daily in hospitals all over the country. Miller[1] showed this very clearly in his analysis of hysterectomies done in fifteen midwestern hospitals over a six month period.

Before any operation one should ask himself these questions: "Will this operation definitely or almost certainly help this patient?" "Will the help be of a lasting nature?" "Is there some lesser procedure involving less risk, trauma and expense which might serve the ultimate purpose just as well?"

All of the above questions certainly apply when one considers removal of the womb. To a woman, the womb is not only a functioning organ, it is one of the chief symbols of femininity. She is constantly reminded of this by the recurring menstrual periods and by the womb's important part in reproduction. The endocrine role of the womb has not been proven or disproven but there may be some important pituitary-ovarian-uterine synergism.

Therefore one must consider and weigh the necessity of hysterectomy in each individual case against the possible far reaching psychologic and endocrinologic results it may bring. Let us remember this before we urge a patient to have her womb removed on a flimsy uncertain basis. Often these patients haunt the surgeon, the psychiatrist, or some other physician for many years afterwards.

Bearing the foregoing in mind, I believe each case should be subjected to the following analysis: (1) severity of disease, (2) severity of symptoms and mental stability of patient, (3) age of patient, (4) parity and desire for pregnancy and (5) operability and operative risk. Applying

these questions we might briefly discuss some of the more common maladies for which hysterectomies are done.

BENIGN UTERINE TUMOR

Since this is perhaps the most common pathologic entity treated by hysterectomy, let us consider it in some detail.

1. *Severity of the disease.*—Myoma uteri cannot be called a serious disease *per se.* Many women have one or more uterine myomas for years and never know it. They are found at autopsy in about 1 out of 5 women,[2] and the fact that a few small symptomless nodules are felt in the uterus is no legitimate indication for hysterectomy.

Malignant degeneration is rare. Sarcoma of the uterus which of course almost always arises in a myoma accounts for only 3 to 4 per cent of all uterine malignancies. Any rapid increase in size should make one suspicious of possible malignant changes.

2. *Severity of Symptoms.*—This seems to be one of the most important considerations, particularly in the 30 to 40 age group. Is the bleeding severe, constant or often recurring? Is the pressure on the bladder or rectum interfering with the normal functions of these organs? Is there considerable back pain or dysmenorrhea which can not be controlled adequately by minor treatments or medicines? Is the patient generally incapacitated to carry out normal duties at home or at her place of employment? What is the mental stability of the patient? Are many of her complaints on a psychosomatic basis?

3. *Age.*—Myomectomy is preferable if at all possible in the younger age group. In the older age group of 40 to 45 years expectant treatment often is indicated because it is a well known fact that myomas usually regress in size or may even disappear during and after the menopause.

4. *Parity and Desire for Pregnancy.*—(To me these are very important considerations). Is the patient married? Does she expect to be married? Does she have or want children? Is the patient willing to put up with the symptoms a while longer in the hope of conceiving and bearing children? Would myomectomy suffice and thus leave the woman her child bearing function?

5. *Operability and Operative Risk.*—Does the patient have an associated disease which might be aggrevated by hysterectomy? Would intrauterine radium or external irradiation be less dangerous and at the same time accomplish adequate relief after diagnostic curettage to rule out cancer and feel the contour of the endometrial cavity?

MALIGNANCY

Here, all of the other questions must be suppressed into the background by the one "severity of disease".

Be it a proven and operative carcinoma of the cervix or endometrium then the choice is clear. No attempt will be made here to argue irradiation versus surgery.

Certainly when the abdomen is opened and a definite carcinoma of the ovary or tube is found the womb should also be extirpated as well as the other ovary and tube because of the communicating lymphatics and possible spread which may already be present microscopically.

DESCENSUS

Seldom do age, parity or the desire for pregnancy enter into the discussion. If the descensus is present in a patient of the younger age group certainly thought should be given to the possibility of some type of suspension of the uterus. In one case of descensus associated with a large fundal myoma, myomectomy and suspension were done. The gravida o later became pregnant and was delivered normally.

FUNCTIONAL UTERINE BLEEDING

Functional or dysfunctional uterine bleeding, as one may care to call it, may occur at any age between puberty and the well established menopause. It is however most frequently encountered during the beginning and decline of the menstrual function when the second phase of the ovarian cycle, luteinization, is most likely to be defective or absent. Regularly menstruating women of child bearing age do not often have dysfunctional uterine bleeding, but those who menstruate at irregular intervals are prone to bleed abnormally. The abnormality may be due to one or more of the many possible disturbances, most common of which are pituitary dysfunction, hypothyroidism, incomplete ovarian function or inability of the uterus to respond normally to the sequence of stimulation or to a deficiency of vitamin B.

Uterine bleeding in women of child bearing age usually is due to accidents of early pregnancy, pelvic inflammatory disease or constitutional disorders. Women at this age are of course not exempt from a malignancy of the uterus in which irregular bleeding is a cardinal symptom. Certainly in functional bleeders of the puberal and child bearing age hysterectomy

should be a last resort. Jones and TeLinde[3] found that 40 per cent of functional bleeders were cured by a single dilatation and curettage, and 20 per cent more by repeated curettments. Chemical and hormonal curettage with stilbestrol, natural estrogens or progesterone often produce very satisfactory results and if necessary may be used to advantage after diagnostic dilatation and curettage. Some men have advocated the use of low dosage irradiation. I have had no personal experience with this but feel that with our limited knowledge of the possible far reaching effects of irradiation this treatment should be used only if castration is desired and then of course larger doses should be directed to the pelvis.

PELVIC INFLAMMATORY DISEASE

Acute pelvic inflammatory disease is seldom, if ever, an indication for pelvic surgery. This was true before the advent of chemotherapy or antibiotics and certainly is true at the present time. Oft times a "red hot" pelvis with much edema and even abscess formation will resolve under specific therapy and will leave the patient with normal well functioning pelvic organs. However, repeated infections and improper treatment may result in scar tissue deposits, inadequate blood supply to the ovaries, agglutinations of the tubal lumens and at times chronic endometritis. These cases of chronic pelvic inflammatory disease often require pelvic surgery under the "severity of symptoms" category. If both ovaries are definitely pathologic and bilateral tubal lumens are obliterated then panhysterectomy should accompany the other pelvic surgery.

ENDOMETRIOSIS AND ADENOMYOSIS

Endometriosis is a disease of the child bearing age. Therefore conservation of this function is of prime importance and hysterectomy is seldom indicated. If symptoms and progression of the disease warrant laparotomy one may be able to dissect out the offending cysts and adhesions and preserve the patient her child bearing function.

Adenomyosis with diffuse enlargement of the uterus and severe symptoms of dysmenorrhea and pelvic pressure usually occurs in the older premenophausal age group, when preservation of the reproductive organs is not so important.

SYMPTOMATIC RELIEF

Blood dyscrasias or systemic or endocrine dysfunctions which produce uncontrolable uterine bleeding may occasionally prompt extirpation of the uterus. An example of this is a patient with idiopathic thrombocytopenic purpura who is continually anemic from vaginal bleeding. At a futile re-exploration for an accessory spleen, total hysterectomy was done in one such case with gratifying results. The patient was not cured of her basic disease but at least the main blood-letting route was silenced and thus possibly her life was prolonged, giving her further chances for a cure.

OBSTETRICAL EMERGENCIES

Hemorrhage of pregnancy, be the patient delivered or undelivered, is about as fearful an ordeal as any medical or surgical emergency which one must face. Even then one must stop for a moment and think for, as usual, haste without a definite aim or objective makes waste. With a premature separation of placenta, which requires laparotomy, a ruptured uterus or postpartum hemorrhage due to atonia, one may occasionally find it necessary to extirpate the womb. The same holds true for the very rare condition of true placenta accreta, or deep vagino-cervical tears into the broad ligament. All of the foregoing conditions are generally sudden and dramatic, and require immediate attention, but they seldom require hysterectomy in this present day of abundant available blood, chemotherapeutics, antibiotics and improved surgical technics. The same holds true for the grossly infected Cesarean section cases which a few years ago would have been subjected to Porro sections. Now, the Porro is seldom indicated simply because the patient has been in labor long hours or frank pus is present in the uterus. Here the only question is, "Will the uterus contract firmly to prevent excessive bleeding?" The uterus will generally do this and the doctor will have a grateful patient.

The last comment is outside the scope of this paper but I want to urge strongly panhysterectomy over subtotal hysterectomy wherever it is feasible. Just remember that subtotal hysterectomy has nothing of advantage to offer except speed. How often is the fifteen to thirty minutes important? Perhaps once in ten or fifteen cases. We must remember that the best surgeon is often far from being the most speedy and dextrous. May I again repeat: Most gynecological surgery is easy. Let us take it easy on our patients.

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TRAUMATIC LESIONS OF THE URINARY BLADDER AND URETHRA

(A STUDY OF 50 CASES)*

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With early diagnosis, prompt treatment and liberal use of antibiotics rupture of the bladder or urethra is associated with a negligible primary mortality rate. This is in sharp contrast to results following the best of management ten years ago. Culp, in 1942, reported a mortality rate of 64 percent in cases of rupture of the bladder. McCague and Semans, in 1944, reported a mortality rate of 23 per cent. These high figures were greatly influenced by associated injuries and the generally inadequate treatment for traumatic shock which prevailed a decade ago.

The purpose of this paper is to review the fundamental points in the early diagnosis and management of rupture of the bladder and urethra, and the report is based on 50 cases treated at the Medical College of Virginia Hospitals during the past twelve years. There were thirty patients with rupture of the bladder and twenty with rupture of the urethra. At this institution it is customary to ask for urological consultation when there is hematuria, either gross or microscopic, following trauma. It is estimated that some two hundred patients were examined during this twelve year period. All lesions due to urological instrumentations and peri-urethral abscesses were excluded since diagnosis is not a major factor in these instances.

PLANES OF EXTRAVASATION

Extravasation from rupture of the bladder may be intraperitoneal or extraperitoneal, or both (figure 1). There is considerable variation in the location of the peritoneal reflection upon the bladder, depending on the degree of bladder fullness and the individual. In children the bladder is almost entirely surrounded by peritoneum.

Extraperitoneal rupture of the bladder allows extravasation into the space of Retzius. This potential space extends downward to the triangular ligament and laterally around the bladder to the inferior hypogastric wing of the endopelvic fascia (the fascial condensations which surround the ureter and inferior vesical artery). Extravasation may dissect upward between the peritoneum and the abdominal musculature or through the femoral canal into the thighs. This is the only way that urine can extravasate into the thighs.

Posterior rupture of the bladder is rare except from bullet wounds or other sharp objects. If the pouch of Douglas is involved there is intraperitoneal extravasation; if not, there is retroperitoneal extravasation or extravasation into the ischiorectal fossa and the perineum.

Rupture of the prostatic urethra results in urinary extravasation into the perivesical tissues similar to an extraperitoneal rupture of the bladder.

The so-called triangular ligament or urogenital diaphragm containing the external urinary sphincter is located just below the apex of the prostate. It is firmly attached to the rami of the ischii laterally and offers a firm barrier to extravasated urine from the bladder or prostate. This structure is covered above by a membranous layer of fascia which is part of the endopelvic fascia and below by a dense fascia continuous with Colle's fascia. Rupture of the triangular ligament (almost invariably associated with fracture of the ischium) may allow urinary extravasation to follow the same planes as in extraperitoneal rupture of the bladder, or urine may extravasate in a manner similar to that of rupture of the anterior urethra. The former usually results, due to the weakness of the fascia covering the triangular ligament dorsally.

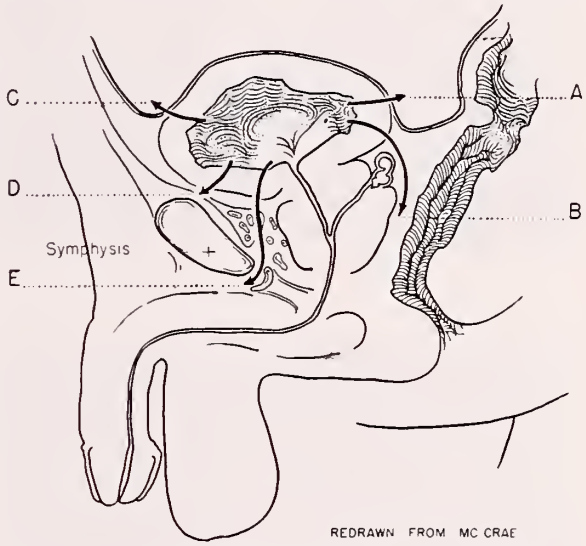

Fig. 1. Diagram demonstrating possible routes of extravasation following rupture of the bladder.

The urethra is arbitrarily divided into anterior and posterior urethra at the level of the triangular ligament. Trauma of the anterior urethra

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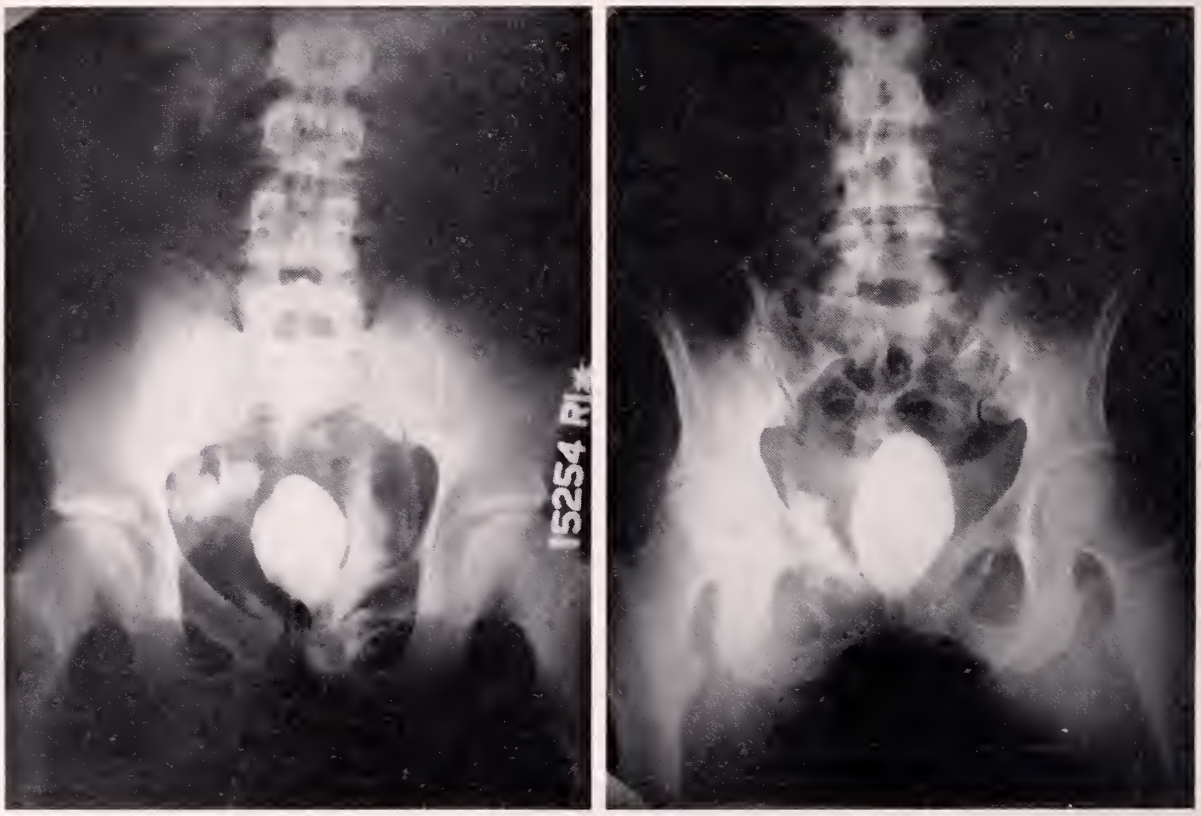

Fig. 2. Cystograms revealing rupture of the bladder.

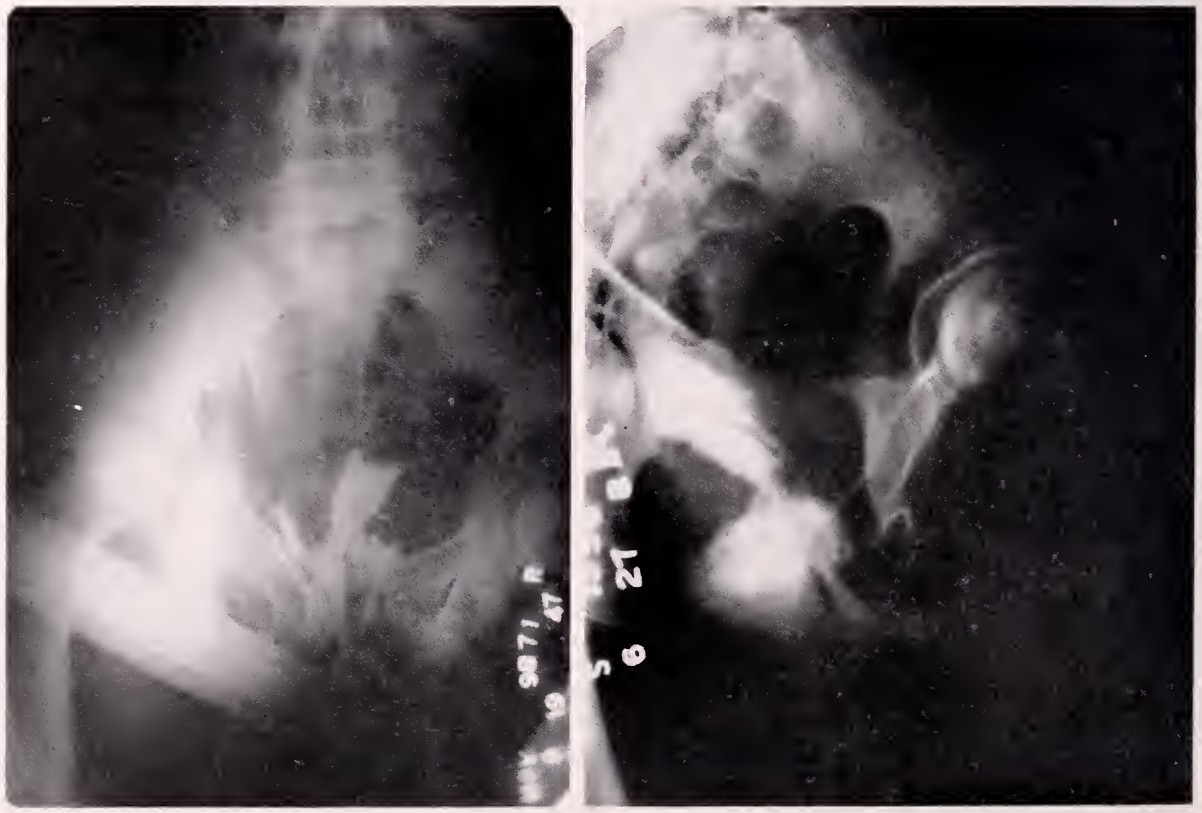

Fig. 3. Urethrograms demonstrating rupture of the urethra.

allows leakage of urine to follow the planes of Buck's and Colle's fascia. Buck's fascia is intimately attached to the corpora and extends from the corona of the glans penis to the bony attachment of the ischii. Colle's fascia is more superficial and is a continuation of Scarpa's of the abdomen and the Dartos of the scrotum. Colle's fascia extends around the bulb of the urethra and forms the inferior surface of the triangular ligament. Between Colle's and Buck's fascia is a potential space in which extravasated urine can collect and by fluid dissection may extend into the scrotum or under Scarpa's fascia onto the abdomen. The attachment of Scarpa's fascia at the inguinal ligament prevents extravasation of urine into the thighs from rupture of the anterior urethra.

These anatomical planes of extravasation are valid provided the trauma of the urinary tract is recent and the urine uninfected. A purulent extravasation quickly causes a fulminating phlegmon which is not confined by fascial barriers. (Hinman).

DIAGNOSIS

In 75 per cent of cases in this series trauma of the bladder and urethra was associated with other injuries. In 56 per cent of these injuries there was included fracture of the rami of the pubic bones. The associated injuries may temporarily overshadow the presence of a ruptured bladder or urethra. Shock usually was not present in the early or late cases and, when present, was interpreted as being due to the associated injuries. Spasm of the abdominal muscles may or may not be present, being found in only 50 per cent of the ruptured bladder cases and many of these were those who received treatment 24 hours or more after the injury. Patients with ruptured bladder or urethra usually are unable to void, but a sufficient number will void to invalidate this accomplishment as a criterion. Of the ruptured bladders, 13 per cent were able to void and 40 per cent of those with ruptured urethra were able to void. Blood in the urine should be present invariably. (The accuracy of the examination in the one case in this series in which hematuria was absent is seriously questioned in view of the postmortem findings of a pelvic abscess surrounding a large rent in the bladder). Based on experiences with these patients, we have concluded that if diagnosis is attempted prior to the development of obvious extravasation, there are no reliable clinical signs on physical examination of rupture of the lower urinary channels. The one exception to this statement is found in those cases in which there is displacement of the prostate due to a complete separation of the prostatic or membranous urethra. This was present in only 10 per cent of our patients with ruptured urethra.

It is the opinion of the authors that the patient with trauma of regions of the body in which ruptured bladder or ruptured urethra is a possibility, and with hematuria in a voided or catheterized specimen, should have a cystogram and urethrogram as soon as his general condition is satisfactory and emergency treatment for shock, lacerations and fractures has been given. These x-rays may be made while the patient is receiving other diagnostic studies, and the technic consists of injecting two to three hundred cubic centimeters of any dilute urological contrast media into the bladder and making a picture with the bladder distended (figure 2). If this reveals no extravasation, a second film should be exposed after the contrast media has emptied, as not too infrequently a small amount of extravasation will be hidden by the distended bladder. When both of these x-rays are normal a urethrogram should be made by injecting the media through the urethra with a catheter or syringe and exposing the film while the urethra is distended (figure 3). When all three pictures are normal one may safely assume that any hematuria is due to contusions or injury of the upper urinary tracts. When a catheter cannot be passed, a cysto-urethrogram alone may enable one to make a diagnosis. Usually when a catheter cannot be passed there is enough displacement of the prostate or sufficient contusion of the anterior urethra to render obvious the diagnosis of rupture of the urethra.

When acurate x-ray diagnosis is impossible or impractible the following test has some merit. A urethral catheter is passed and a carefully measured amount of saline is injected to the point of discomfort and the amount recovered is measured. A difference between the two figures is supposed to represent fluid which has extravasated. This test is simple but subject to considerable error. However, when the amount returned is precisely the same as the amount injected one may feel reasonably sure that the bladder is intact. Some of the reasons for inaccuracy are as follows:

(1) The catheter may be in the prostatic urethra and return flow will be impaired by the neck of the bladder.

(2) A large prostate may allow accumulation of fluid behind a median lobe.

(3) Vesical diverticuli may puddle enough of the fluid to cause miscalculation.

CHART I RUPTURE OF THE BLADDER

Case	*Type Injury*	*Time Before Treated*	*Shock*	*Abdominal Spasm*	*Voiding*	*Hematuria*	*Fractured Pelvis*	*Other Injuries*	*Diagnosis*	*Treatment*	*Type of Rupture*	*Anti Biotics*	*Result*
1. D. J. 104646	Car Wreck	Few Hours	Mod.	Yes	No	Yes	Yes	Minor	Clinical	Operative	Extra-peritoneal	Yes	Good
2. R. W. 94310	Car Wreck	One Hour	Mod.	No	No	Yes	Yes	None	Cystogram	Operative	Extra-peritoneal	Yes	Good
3. V. M. 102449	Uncer-tain	12 hrs.	No	No	No	Yes	No	None	Clinical cystogram	Operative	Intra-peritoneal	No	Good
4. D. D. 36019	Sharp Object	6 hrs.	No	No	No	Yes	No	Perforated Rectum	Clinical	Operative	Intra-peritoneal	No	Good
5. J. S. 80473	Train Wreck	12 Days	No	No	Leaking Fistula	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	Yes	Good
6. J. G.	Car Wreck	1 hr.	Mod.	No	No	Yes	Yes	None	Clinical	Operative	Intra-peritoneal	Yes	Good
7. J. S. 31841	Car Wreck	Six Days	Mod.	Yes	No	No	Yes	Multiple, Serious	Not Made	None	Extra-peritoneal	Yes	Died (Autopsy Diagnosis)
8. A. B.	Fell on Distended Bladder	Two Days	Mod.	Yes	No	Yes	No	None	Clinical	Operative	Extra-peritoneal	No	Died of uremia day after operation
9. J. D. 30468	Car Wreck	2 hrs.	Mod.	Yes	Yes	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	No	Died of sepsis on 50th day
10. S. E. 29095	Fell From Tree	Nine days	No	Yes	Yes	Yes	Yes	Minor	Clinical	Operative	Extra-peritoneal	No	Died NPN 180 mgm.%
11. A. R. 31750	Car Wreck	2 hrs.	Mod.	Yes	No	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	No	Good
12. J. T. 90582	Manual Pressure (Paraplegic)	2 hrs.	No	No	No	Yes	No	None	Clinical	Operative	Intra-peritoneal	No	Died on fifth day
13. R. C. 33039	Trauma Obstetrical	2 hrs.	Yes	No	No	Yes	No	Ruptured Uterus	Clinical	Operative	Extra-peritoneal	No	Good
14. J. S.	Car Wreck	2 hrs.	No	No	No	Yes	Yes	Minor	Clinical	Operative	Intra-peritoneal	No	Good
15. B. S. 32043	Car Wreck	1 hr.	Severe	Yes	Yes	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	No	Died 28 days later
16. B. D. 80680	Car Wreck	One hour	Mod.	No	No	Yes	Yes	Major	Cystogram	Operative	Extra-peritoneal	Yes	Good

17. J. N. 80272	Car Wreck	2 hrs.	No	No	No	Yes	Yes	Minor	Cystogram	Operative	Extra-peritoneal	No	Good	
18. J. H. 37858	Fall from building	2 hrs.	No	Yes	No	Yes	Yes	Minor	Clinical	Operative	Extra-peritoneal	No	Good	
19. J. W. 47539	Car Wreck	7 hrs.	Mod.	No	No	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	No		Good
20. T. S. 39396	Car Wreck	6 hrs.	No	Yes	No	Yes	Yes	Minor	Clinical	Operative	Intra-peritoneal	No		Good
21. H. L. 63840	Hit by Car	3 hrs.	No	Yes	No	Yes	No	None	Cystogram	Operative	Intra-peritoneal	Yes		Good
22. C. H. 2007	Car Wreck	Few hours	No	Yes	No	Yes	No	Minor	Clinical	Operative	Intra-peritoneal	Yes		Good
23. R. P. 24195	Car Wreck	Four days	No	Yes	No	Yes	No	None	Clinical	Operative	Intra-peritoneal	No		Good
24. A. R. 20553	Car Wreck	2 hrs.	Mod.	Yes	No	Yes	Yes	Major	Clinical	Operative	Extra-peritoneal	No		Good
25. F. H. 86909	Uncertain (Inebriated)	Six days	No	Yes	Yes	Yes	No	None	Clinical	Operative	Extra-peritoneal	Yes		Good
26. K. J. 99909	Falling Tree	6 hrs.	No	Yes	No	Yes	Yes	Minor	Cystogram	Operative	Extra-peritoneal	Yes		Good
27. C. B. 68555	Sudden Blow	------	No	Yes	No	Yes	No	None	Clinical	Operative	Intra-peritoneal	Yes		Good
28. J. T. 94537	Fell from train	1 hr.	Yes	No	No	Yes	Yes	Major	Cystogram	Operative	Extra-peritoneal	Yes		Good
29. B. S. 72188	Pistol bullet	Few hours	No	No	No	Yes	Yes	Minor	Cystogram	Operative	Extra-peritoneal	Yes		Good
30. J. M. 103810	Shotgun wound	2 hrs.	Mod.	No	No	Yes	Yes	Major	Clinical	Operative	Extra & Intra-peritoneal	Yes		Good

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CHART II RUPTURE OF THE URETHRA

Case	Type Injury	Time Before Treated	Shock	Voiding	Hematuria	Fractured Pelvis	Prostate Displaced	Diagnosis	Treatment	Antibiotics	Result
1. W. S. 24720	Car Wreck	3 days	No	No		Yes	No	Clinical	Cystostomy, Urethral Splint	No	Good
2. T. W. 3123	Dirt Cave-in	2 hours	No	No		Yes	No	Clinical	Perineal Repair	No	Good
3. R. G. 55983	Logging Accident	Few hours	No	No		Yes	No	Clinical	Cystostomy, Urethral Splint	Yes	Severe urethral stricture
4. J. J. 48494	Car Wreck	3 hours	No	No		Yes	Yes	Cystogram	Cystostomy, Urethral Splint	Yes	Good
5. B. C. 47449	Straddle Injury	Few hours	No	No	Yes	No	No	Clinical	Urethral Catheter	Yes	Good
6. M. A. 86637	Straddle Injury	20 hours	No	Poor	Yes	No	No	Clinical	Cystostomy	No	Mild stricture of urethra
7. S. D. 34020	Car Wreck	24 hours	No	Poor	Yes	Yes	No	Urethrogram	Catheter Drainage	Yes	Good
8. W. S. 47829	Hit by Car	24 hours	No	Poor	Yes	No	No	Clinical	Perineal Repair	Yes	Good
9. W. H. 50008	Car Wreck	1 hour	No	Yes	Yes	Yes	No	Clinical	Catheter Drainage	No	Good
10. B. G.	Straddle Injury	Few hours	No	No		No	No	Clinical	Perineal Repair	Yes	Good
11. F. P. 30199	Car Wreck	Few hours	Yes	No		Yes	Yes	Clinical	Cystostomy, Urethral Splint	Yes	Good
12. O. B. 92653	Fall	24 hours	No	Poor	Yes	Yes	No	Clinical	Cystostomy, Urethral Splint	Yes	Good
13. C. H. 9754	Fall	2 hours	Mod.	No		Yes	No	Clinical	Cystostomy, Drains	Yes	Mild stricture of urethra
14. W. W. 69343	Car Wreck	6 hours	Mod.	No	Yes	Yes	No	Clinical	Catheter Drainage	No	Good
15. H. C. 30821	Car Wreck	3 hours	No	No	Yes	Yes	No	Clinical	Cystostomy, Drains	No	Stricture — later died of pyonephrosis
16. G. T. 37710	Car Wreck	1 hour	Severe	No		Yes	No	Clinical	Cystostomy, Urethral Splint	Yes	Died
17. S. H. 29007	Straddle Injury	13 days	No	Poor	Yes	No	No	Clinical	Perineal Repair	Yes	Good
18. L. C. 59304	Straddle Injury	2 hours	No	No		No	No	Clinical	Perineal Repair	Yes	Good
19. C. H. 99399	Fall	4 hours	No	Yes	Yes	Yes	No	Clinical	Cystostomy, Urethral Splint	No	Good
20. C. W. 72223	Car Wreck	48 hours	No	Poor	Yes	Yes	No	Urethrogram	Catheter Drainage	Yes	Severe stricture of urethra

(4) Small perforations from a spicule of shattered bone may seal off after the escape of extravasated urine has decompressed the bladder .

MANAGEMENT

The treatment of extraperitoneal rupture of the bladder is cystostomy, with drainage of the perivesical tissues where extravasation has occurred or may develop. Repair of the laceration is indicated when the lesion is large enough to permit insertion of a finger. Small puncture wounds heal readily provided the bladder is constantly deflated. A urethral catheter is not essential unless there is much bleeding from the contused bladder mucosa. After seven to ten days the suprapubic catheter may be removed and urethral drainage re-established. The entire procedure may be done easily under local anesthesia.

Intraperitoneal rupture of the bladder requires a more extensive operation. The peritoneal cavity is opened and the bowel inspected for injury. After aspiration of extravasated urine and adequate lavage with saline, the peritoneum is separated from the bladder and repaired. The peritoneal cavity is then closed and the bladder laceration repaired in one or two layers, with a cystostomy tube in place and perivesical drainage. A urethral catheter is also used as an extra precaution to keep the bladder from becoming accidentally distended.

A complete laceration of the prostatic or membranous urethra is treated by suprapubic exposure and approximation of the torn ends of the urethra over a self-retaining catheter with a large hemostatic balloon. This catheter is placed under just enough tension to bring the severed ends of the urethra together and act as a splint. We have not found direct approximation with sutures necessary or advisable. The splinting catheter is not depended on for drainage and a cystostomy tube is invariably placed for this purpose. The tension may be released from the urethral catheter after seven days and the catheter removed in about two weeks.

Lacerations of the anterior urethra are best repaired by exposure of the urethra and suturing of the torn ends over a catheter, using very small absorable suture material. The traumatized and extravasated area must be adequately drained. When there is only a small laceration of the urethra catheter drainage alone may be adequate but since one cannot be certain as to the size of the laceration, our policy is exploration in any case in which an interruption of the continuity of the urethra is demonstrated on urethrogram.

RESULTS

There have been no deaths associated with rupture of the bladder since 1941. Prior to that year there were six deaths, or 33 per cent of those cases treated before 1941. Two-thirds of those who died had lesions more than 24 hours old, and 50 per cent were associated with major injuries of other areas of the body. We feel that the absence of mortality since 1941 is due to several factors. There has been a conscientious effort to diagnose the presence of urinary extravasation before it is clinically obvious and to institute early operative treatment. Chemotherapeutic and antibiotic agents have played an equally important role in salvaging many cases. Hospital days per patient have not been calculated because of the great variation due to associated injuries. In the patients who lived the results were uniformly good, with no residual evidence of bladder or urethral pathology. This is no more than should be expected since a ruptured bladder, with early diagnosis and adequate treatment including drainage of tissues in which urine has extravasated, should carry no more primary mortality than an ordinary routine cystostomy.

One patient, or 5 cer cent, with ruptured urethra died. This individual was 71 years of age and had major injuries of other systems including fracture of both legs. He was admitted in profound shock shortly after injury. Death occurred one day postoperatively and at post mortem examination no definite cause could be ascertained. Apparently the ruptured urethra was not the major cause of his death.

In 25 per cent of patients with lacerations of the urethra strictures developed varying in severity. This complication does not seem to be related to the type of operation performed, location of the lesion, duration of injury prior to treatment or use of antibiotics. One of these patients returned fourteen months later with bilateral pyonephrosis which contributed to his death. Another required a secondary operation with resection of a dense stricture. This high incidence of stricture formation impresses one with the fact that interruption of the continuity of the urethra is more likely to result in the patient's becoming a urological cripple than rupture of the bladder.

CONCLUSIONS

Patients who have sustained trauma of the pelvic region and who have hematuria or voiding difficulties should be examined for laceration of the lower urinary channels as soon as their gen-

eral condition permits. Clinical findings may lead one to suspect rupture of the bladder or urethra but are not usually diagnostic prior to the onset of obvious extravasation Early diagnosis can be best accomplished by making a cystogram or urethrogram.

When an interruption in the continuity of the bladder or urethra is discovered, exploration is indicated as soon as possible. Rupture of the posterior urethra is best treated by splinting urethral catheter and temporary cystostomy drainage. Rupture of the anterior urethra should be treated by approximation of the severed urethral edges over a urethral catheter.

There are no late complications following recovery from an adequately treated rupture of the bladder. Rupture of the urethra is associated with the development of stricture in about 25 per cent of cases.

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FEAR NORMAL

Fear is the most troublesome human emotion because it is usually the strongest. It is even present in the new-born infant. Fear is man's inheritance from a remote past in which it functioned to preserve his primitive ancestors and although man no longer faces the same hazards as his early antecedents, fear is still a powerful influence in his life. However, when correctly understood and wisely used, it may be constructive force of great value.

When the emotion is aroused, the nervous system immediately mobilizes the individual for action. This action may be either running away from the threat or fighting to defend oneself. The fear is felt automatically and before one thinks; what one does depends upon established attitudes and patterns of behavior in terms of courage.

Man is a gregarious animal, a social being who is happiest when he is with his own kind. From the day the first man found protection, added strength, and comfort in the presence of another human being, this herd instinct has developed to its present social usefulness. Psychologically as well as physically one needs his family and his fellow men and they need him. Hence, the wise physician directs his patient towards the warm stream of close personal relationships.

Above all else, the doctor must always remember that fear is normal. It is universal and nothing of which to be ashamed. The patient should be encouraged to acknowledge the presence of fear with pride, not regret, since without it there can be no courageous behavior. It is a powerful force in motivating man's finest and most glorious actions.—Conn. St. Med. J.

USE OF B. C. G. IN TUBERCULOSIS

Although some hold the substantial eradication of tuberculosis is in sight, new approaches in case finding and new methods of prevention and treatment bring in focus powerful and fundamental forces that tax the ingenuity of the physician, scientist, philosopher, and prophet.

For instance, with a declining infection rate, should tubercle bacilli in the form of B.C.G. Vaccine be introduced into the body, even if disease does not result from vaccination? Do the degree and period of immunity justify the resulting protection in communities and groups with low infection rates? Will B.C.G. eventually serve to decrease tuberculosis disease in the population? Is it better that the population be free from infection and lose some degree of protection, or be universally infected and profit by the immunity it affords?

There are perhaps no adequate answers to the questions raised, but the prevailing view now held in the United States is that B.C.G. should be used only where danger to exposure is great.—Westchester Medical Bulletin.

TREATMENT OF ELDERLY ALCOHOLICS

In the treatment of elderly alcoholics there are several unique problems. Foremost is the fact that certain motivations that operate in the younger age groups of alcoholics are lacking; namely, hope for an expanding future, with restitution to society in good repute. Secondly, depth psychotherapy is difficult to carry out because of the elderly person's decreased capacity for reorganization. Finally, such adjuvants to treatment as the conditioned reflex and antabuse cannot be employed because of the cardiovascular impairments usually present. Therefore, treatment and rehabilitation for the most part must be based on psychosocial guidance.—New England Journal of Medicine.

CALCULATED RISK

There is a calculated risk in everything. There has been a calculated risk in every stage of American development. The nation was built by men who took risks—pioneers who were not afraid of the wilderness, business men who were not afraid of failure, scientists who were not afraid of the truth, thinkers who were not afraid of progress, dreamers who were not afraid of action.—Brooks Atkinson.

PRESCRIBING TOO MUCH TOO OFTEN

In the stress of daily practice doctors are sometimes prone to overlook the amount of medication prescribed and the frequency with which it is changed. As a result, the patient often finds himself left with an assortment of half-used prescriptions that represent waste and serve to remind him, long after he has recovered, that his illness might have been managed more efficiently.

The basis for this tactical error in therapy may be found in according too little consideration to the diagnosis and leaning heavily on the therapeutic-diagnostic approach towards cure. It also arises from a failure to take the time and trouble to learn beforehand—away from the din of prejudiced claims—the action of the therapeutic agent to be used, the relative value of similar products and the comparative cost of each. The natural result of this thoughtlessness is to prescribe too much too often, so that the attack on the illness becomes anything but the well-planned campaign it should be, in which all forces and weapons are skillfully deployed. And the complex schedule thus imposed can become an added burden that may even retard recovery.

Much more effective and impressive the approach if, instead of practicing by ear only, the doctor planned treatment in advance and prescribed indicated medication only in amounts sufficient for the shortest possible duration of the illness, with adequate time allowed for evaluation.

The patient, of all people, would come out ahead both in cure and in cost.—Wm. S. Reveno, M. D., in Detroit Medical News.

A SUPPLEMENT, NOT A SUBSTITUTE

When the interne enters into general practice he finds himself at a loss from the start, for the lack of the many laboratory facilities to which he was accustomed while interning. However, he soon learns that he can do with much less of the scientific tests, providing he uses his practical experience that he gained during his interneship days. He can use his knowledge to good advantage by applying his medical acumen to the fullest extent. His hospital privileges as ex-interne, the available outside laboratories in the various fields, and the recognized diagnostic clinics, fill in most of the gaps that follow the receipt of the diploma as a graduate interne.

Those who choose to settle in the rural sections and in the sparsely settled areas, away from medical centers, are apt to miss many of these laboratory facilities. Nevertheless, their previous training should enable them to select the essential laboratory equipment for the important laboratory examinations that they might need in their varied general practice. However, the more complicated tests, requiring special equipment and experience, may have to be referred to a neighboring available up-to-date laboratory. Such laboratories are ready and willing to accommodate these rural practitioners.

A happy medium is a combination of the necessary laboratory data with the application of the doctor's acumen. The laboratory should be used as a supplement but not as a substitute for the doctor's inherent and acquired knowledge and experience in the skillful care of his patients.—Bulletin, Med. Soc. County of Kings (N. Y.)

THE DANGEROUS AGE

Injury to athletes of college age, whether they be in the last year of high school or actually in college, are now receiving more effective treatment than ever before, and with this better care improved preventive measures are being used, such as the protective strapping of knee joints and ankles.

The sad part of the story is that the age when bone and joint injury may be more serious, not only in the immediate nature of the injury but also as regards later functional results—this dangerous age of fourteen to eighteen years—is also the age at which the player is least likely to receive the necessary supervision, both for adequate treatment of injuries and for proper prevention and protection against them. Many a youth has been incapacitated for college football by such injuries, especially of the knee, sustained and inadequately treated during his precollege years.

The bones at this age may have attained their adult length, but the epiphyses are not yet solid, and the joints lack the firm support of the more fully developed ligaments and muscles of a twenty-year-old youth.

It becomes obvious, however, for physiologic reasons, that there is greater danger in playing football during the age of growth than there is at a slightly more advanced age. The medical profession should more effectively point out these dangers and the reasons that they exist, particularly since supervision and protection of the younger player are generally inadequate. Not to do so is to invite injury that may have serious and lasting consequences.—New England Journal of Medicine.

THE OVERWEIGHT CHILD

Nature will "cure" only about one-third of obese children; this change is likely to occur with puberty. But it is a mistake to expect this physiologic correction or to wait for it. I have obtained the best results with diet, exercise, and drugs combined. About 75 per cent of patients so treated attained fairly normal weight. This was achieved in about three to six months. I continue the reduction diet until the patient is at the ideal normal weight, or no more than ten per cent above this poundage.

About one-third of the obese children will not continue therapy until good results are obtained. "Policing" is very necessary. Especially in the early months, all obese patients need to be shown much interest. They need convincing and sympathy to gain their cooperation in this trying routine.

After the period of treatment, about one-half of them can safely return to a normal diet and can control their tendency to overeat. About 20 per cent of these obese children do not lose weight when, supposedly, they are on markedly restricted calorie and fluid intake; in most of such cases they are eating more than the prescribed diet.—Wm. A. Reilly, M. D., in GP.

The President's Page

The last Rural Health Conference was devoted to a discussion of "Community Health Councils."

In the "old days" a physician could move into a community, rent a building, buy some beds and equipment on credit and start a hospital. Today, with taxes as they are and hospitals costing $20,000 a bed, a hospital must be a community affair. Physicians get their training in hospitals and are reluctant to practice where they cannot get proper facilities.

The West Virginia Farm Bureau at its annual meeting in August adopted a resolution in which it was stated, among other things, that "the solution of our health problems must be met largely by community action and by taking advantage of help from outside sources, such as is provided by the Hill-Burton Act." It seems not only practicable but probable that councils will supply the answer to our rural health problems.

In areas with established medical and hospital facilities, community health councils serve several purposes. They coordinate the existing health facilities such as Red Cross, tuberculosis and health associations, polio groups, etc. They get people more interested in the health of their communities. And, they are instrumental in the formation of full time health units.

County medical societies should sponsor the formation of community health councils. Physicians should serve in an advisory capacity after their formation. However, they should never seek to dominate the thinking or actions of such groups.

Frank G. Galloway

President.

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OUR DIABETIC PROBLEM

It has been estimated that there are approximately one million known diabetics in Continental United States and that for every known case there is a case as yet undiscovered. The number is increasing because diabetics, properly treated and controlled, are living longer, and in fact leading essentially normal lives.

According to statistics compiled by the Metropolitan Life Insurance Company, the life expectancy of a diabetic is seventy-five per cent that of a nondiabetic of equivalent age. Another factor tending to increase the volume of the diabetic problem is the fact that individual Americans are living longer and the percentage of older people in the total populace is continually increasing, thanks to the excellence of American medicine.

As the age increases the percentage of diabetics among the general population increases rather rapidly. Joslin estimates that there is one diabetic among each 2000 persons under the age of 25, but above 65 the incidence has risen to one among each 75 men and one among each 45 women. Hence, the increase in the number and percentage of older people adds materially to the volume of the diabetic load, especially when we consider that for every person who becomes a diabetic before the age of forty, two will develop the disease after having attained that age.

One feature of diabetes which is becoming more fully understood is the hereditary factor. It is fairly rare to discover a diabetic who does not have a relative, either near or remote, who is likewise a diabetic.

We welcome the advent of Diabetes Week, only recently established. Anything which makes the laity more health conscious increases the length of the life span, and all such movements deserve the hearty support of the medical profession. And that is especially true of the diabetic problem, one-half of which is submerged. The individual physician must assume responsibility for the discovery of the great majority of the unknown diabetics. Hence we should lend every possible aid to the success of Diabetes Week.

HEALTH CONSULTANT NEEDED

The Fourth Annual Rural Health Conference, held at Jackson's Mill on September 28, brought to light many reasons why we must seek to interest people residing in rural areas in the improvement of health conditions and in the extension to those areas of medical and hospital services.

As we listened to the discussion of experts on methods for improving health conditions in West Virginia, we became convinced that much good could be accomplished in any program or campaign agreed upon were we to have the aid of an expert health consultant whose services would be available at all times to those seeking information on this important subject.

One of the speakers at the conference, Sewall Milliken, of Columbus, Ohio, has devoted years to the study of rural health needs. His services as a specialist in rural health organization, attached to the Ohio Agricultural Extension Service, brought him in touch with practically every rural group in that state, and it is no small wonder that in his new capacity as director of public health education of the Ohio State Department of Health he is in demand as a speaker before rural, public health, and medical groups. He is helping many rural communities in Ohio solve their health needs.

We have many very efficient health officers and health nurses over West Virginia. Their work concerns the health of all of our people, those living in urban as well as rural communities. We believe that the appointment of a community health consultant attached to our Agricultural Extension Service, at Morgantown, who could cooperate with our health personnel in the various counties, would mark the beginning of a new and important era in the development of our

statewide program for improved health conditions. The need for the services of such an official will become more apparent with the establishment of community health councils and the construction of community health centers.

DR. GIDEON S. DODDS RETIRES

Professor Gideon Stanhope Dodds, Ph. D., who has been connected with the School of Medicine of West Virginia University since 1918, reached the age of retirement on July 1, 1951.

Before he came to West Virginia, he taught at the University of Missouri and at St. Louis University. He is well known to many physicians in West Virginia. He has been responsible for the courses of embryology and histology for 33 years and is the author of a widely used textbook, "Essentials of Embryology." He has always held high educational standards and has an enviable record as a teacher and lecturer.

Besides his teaching duties, he has served for many years as secretary of the faculty of the School of Medicine and for the past 16 years as chairman of the Committee on Admissions and Scholarship. He has devoted an immense amount of time to the study of problems concerned with premedical education and is well known and highly regarded in premedical educational circles.

Retired faculty members at West Virginia University no longer teach on a limited service basis, so Doctor Dodds has no official connection with the medical school. Although his home originally was in Colorado, he plans to remain in Morgantown. He will devote his time to research and writing and will make special studies of student performance in premedical and medical work. We wish him well in his retirement after long and valued service to the University.

FARM BUREAU AND RURAL HEALTH

Among the resolutions adopted by the West Virginia Farm Bureau at its 32nd annual meeting at Jackson's Mill August 27-29, 1951, was one in which a strong stand was taken in favor of voluntary pre-payment medical and hospital insurance and in which opposition was expressed to compulsory health insurance as advocated by certain federal officials.

The resolution also favors the solution of rural health problems by community action, with the help of funds made available through the provisions of the Hill-Burton Act. The resolution is as follows:

> "It is widely recognized that the number of doctors and nurses in the state is inadequate, and that sufficient hospitals and other health facilities are not available to adequately take care of rural health needs. A well-planned and a well-executed long-time program is necessary to remedy this situation.
>
> "We urge everyone to become acquainted with the services offered by voluntary pre-payment plans for hospital and medical care. In this connection we recommend that County Farm Bureaus support such pre-payment plans in their respective counties.
>
> "The proposed compulsory health insurance program advocated by certain government officials will not solve our health problems and would increase governmental control over the daily lives of all of us. On this basis we express opposition to such proposals.
>
> "In the last analysis, the solution to our health problems must be met largely by community action and by taking advantage of help from outside sources such as is provided by the Hill-Burton Act."

The state meeting of the Farm Bureau was held in August, prior to the Fourth Annual Rural Health Conference, sponsored by the West Virginia State Medical Association and held at Jackson's Mill September 28. The theme of this conference, which was held under the auspices of the Public Relations Committee, was "Community Health Councils," and several speakers took the position that the solution to rural health problems can probably best be found in the creation of community health councils and the construction of health centers.

The suggestions of the speakers at the health conference that community effort is necessary if a solution for rural health problems is to be found seem to be in accord with the action taken by the Farm Bureau at its annual meeting at Jackson's Mill.

MENTAL DETERIORATION

Our knowledge of the mechanism of the processes of aging is still limited. Just as there are nutritional and endocrine factors that speed or retard growth and maturation in the young, so there must be factors that similarly influence decadence. Deficiencies and the composition of the diet, not only through the years, but at critical periods of growth and development, may determine the durability of various tissues. The fluorine intake in childhood with relation to the resistance of the teeth to caries is an example. Another is the possible role which the cholesterol-lipid ratio in the diet plays in the development of atherosclerosis.

That the endocrine glands are concerned in the processes of aging is an inescapable conclusion, but there is as yet no accurate knowledge. In the realm of the psyche, early influences have an important relation to the mental problems of the aged. Attention to mental hygiene in youth should therefore pay dividends in better adjustment and greater happiness in old age.

Heredity is perhaps the most important single factor in determining an individual's longevity, but we know little of its mode of operation. There is great promise that we shall some day be able to practice an intelligent prophylaxis in geriatrics and to effect a real prolongation of the life span.—Richard A. Kern, M. D., in GP.

GENERAL NEWS

DR. R. J. WILKINSON TO BE INSTALLED PRESIDENT OF SOUTHERN MEDICAL

Dr. R. J. Wilkinson, of Huntington, will be installed as president of the Southern Medical Association at the 45th annual meeting at Dallas, Texas, November 5-8, 1951. Installation ceremonies will be held at a meeting at the Baker Hotel Thursday afternoon, November 8, with the president, Dr. Curtice Rosser, of Dallas, presiding.

Doctor Wilkinson was named president elect at the annual meeting in St. Louis in 1950 after completing his term as first vice president. He was a member of the Southern Medical Council for several years and served a term as chairman. He was president of the West Virginia State Medical Association in 1943, and served for four years as a member of the Council. He was chairman of the Council in 1944, and since that time has served as chairman of various key committees of the association.

He is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and a fellow of the International College of Surgeons. He has served as president of the Southeastern Surgical Congress and the Chesapeake & Ohio Railway Surgeons' Association. He has been surgeon in charge of the C. & O. Hospital at Huntington since 1915 and is now chief surgeon at the Wilkinson Surgical Clinic in that city.

Doctor Wilkinson will be the third West Virginia doctor to serve as president of the Southern Medical Association, Dr. Thomas W. Moore and Dr. Walter E. Vest, both of Huntington, having served in that capacity.

Several West Virginia doctors will attend the meeting at Dallas. Dr. Andrew E. Amick, of Lewisburg, a member of the Council, will be present and will attend the annual convention meeting of his group in that city.

Dr. Howard A. Swart, of Charleston, is chairman of the section on orthopedic and traumatic surgery and will preside at the sessions scheduled for November 6-7-8. He will present the annual address of the chairman on Thursday morning, November 8. The subject of his address will be "The Use of Cutis (Skin) as Repair Material in Orthopedic Operations."

Dr. J. J. Brandabur, of Huntington, is secretary of the section on industrial medicine and surgery which is scheduled to meet on November 6. Dr. Kieffer D. Davis, of Bartletsville, Oklahoma, is chairman of the section.

Dr. N. H. Dyer, of Charleston, state director of health, is vice chairman of the section on public health, with meetings scheduled for November 6-7. Dr. James W. Bass, of Dallas, Texas, is chairman of the section.

A former West Virginian, Dr. Joseph L. Knapp, who served for several years as superintendent of the Weston State Hospital, will be one of the speakers before the section on neurology and psychiatry. He is now located in Dallas.

Among the scientific exhibits will be one by Dr. A. P. Hudgins, of Charleston, on "Post Operative Perineal Pain." It has been announced that the 1952 meeting of Southern Medical will be held in Miami, Florida.

UMW LOANS FOR HOSPITAL CONSTRUCTION

The following news story concerning loans for the construction of hospitals in Kentucky, Virginia and West Virginia was released by the UMW Welfare and Retirement Fund for publication throughout the country on October 10, 1951:

The UMWA Welfare and Retirement Fund has approved loans to three non-profit charitable corporations in Kentucky, West Virginia and Virginia for the construction of hospitals over a three year period in ten coal mining communities in these States. The loans are being made to Memorial Hospital Associations of Kentucky, West Virginia and Virginia.

This action was taken by the Board of Trustees of the Fund as the best method by which the obligation of the Trustees to provide adequate hospital and medical care for its beneficiaries could be discharged. Recommendations by the medical officers of the Fund, resulting from their vast experience in developing hospital and medical care for Fund beneficiaries, were the basis on which the Trustees acted.

The Fund is concerned with the quality of care provided its beneficiaries as well as with its cost. Existing hospital facilities meeting these fund requirements of service and cost will continue to be used to the fullest extent possible in the Fund's efforts to meet the hospital needs of its beneficiaries. The continuing inadequacy, or total lack, of hospital facilities in certain coal mining areas of Kentucky, West Virginia and Virginia compel the Fund, in order to discharge its obligations to beneficiaries in these areas, to arrange for the construction of new hospitals and hospital facilities. The three Memorial Hospital Associations will constantly have available for their guidance the wide and specialized experience of the Fund's medical staff.

The hospitals will be built in the general areas of Harlan, Cumberland, Hazard, Pikeville, Jenkins and Wheelwright, Kentucky; Beckley, Logan and Williamson, West Virginia; and Coeburn, Virginia.

The hospital construction program will necessarily be some time in getting under way and the three Memorial Hospital Associations will determine which hospitals will be started first.

Business offices of the Memorial Hospital Association will be located after October 15 on the Sixth Floor, 1427 I St., N.W., Washington 5, D. C. Directors of each of the Memorial Hospital Associations are: Dr. John T. Morrison, Dr. Dean A. Clark, Mr. Edward L. Carey, Mr. Henry C. Daniels, and Mr. Henry Combs.

DR. J. L. WADE RECOVERING FROM ILLNESS

Dr. James L. Wade, of Parkersburg, who has been in St. Joseph's Hospital for the past few weeks on account of illness, is improving satisfactorily and has returned to his home in that city.

LARGE ATTENDANCE AT FOURTH RURAL HEALTH CONFERENCE AT JACKSON'S MILL

More than a hundred representatives of farm, health, medical and nursing groups attended the Fourth Annual Rural Health Conference sponsored by the West Virginia State Medical Association and held at Jackson's Mill September 28. The theme of the meeting was "Community Health Councils."

The morning session was called to order at 10:30 A. M. by Dr. John F. McCuskey, of Clarksburg, co-chairman of the public relations committee, under the auspices of which the meeting was held. He stated the aims of the conference and called upon the president of the State Medical Association, Dr. Frank J. Holroyd, of Princeton, to discuss the results of the previous three conferences sponsored by the medical group.

Dr. N. H. Dyer, of Charleston, state director of health, speaking on the subject of "West Virginia Can Have Community Health Councils," discussed methods by which communities could establish health councils and initiate construction programs for health centers to take care of the needs of the people outside of essentially urban areas.

Mrs. Alice Van Landingham, of Morgantown, health educator for the Monongalia County Health Department since 1948, was the last speaker at the morning session. She told what had been done in Monongalia county with reference to the creation of a health council, the group which is now known as the "health section of the community council." Mrs. Van Landingham said that the following six health committees are now functioning: School health, fluoridation, mental health, social hygiene, medical care and hospitalization, and nutrition. F. J. Holter, Ph.D., of West Virginia University, is chairman of the section.

Following lunch, which was served in the Mount Vernon dining hall, the afternoon session was opened by Dr. Paul L. McCuskey, of Parkersburg, co-chairman of the public relations committee, who summarized the morning's discussion of rural health problems.

Mr. Sewall Milliken, of Columbus, Ohio, acting director of the public health education division of the Ohio State Department of Health, was the first speaker introduced by Doctor McCuskey. His subject was "Health Councils for Healthier Communities."

The speaker, who has been interested in community health improvement programs in his home state for the past several years, discussed the methods followed for interesting various communities over the state in the establishment of health councils, which have helped develop medical and hospital service programs in many communities in Ohio.

Mr. Milliken brought to his present office his wide experience as a specialist in rural health organization attached to the Ohio Agricultural Extension Service, which resulted in his becoming thoroughly acquainted with the need for the extension of health services in that state. A native of Maine, he was formerly connected with the United States Department of Agriculture and in 1950 completed work on his master's degree in public health at the University of Michigan.

Dr. Franklin S. Crockett, of Lafayette, Indiana, chairman of the AMA Committee on Rural Health, followed Mr. Milliken on the program. His subject was "Why Wait? Let's Do It Ourselves."

The speaker discussed the various ways by which his committee is endeavoring to improve the health of people residing in rural areas over the country. He stated that his group had received splendid cooperation from the Farm Bureau, Farm Women's Council, the Grange, and other farm groups, and that there is more interest year by year in the work that is being done by his division. He said that the attendance at national rural health conferences is increasing each year, and that every effort is being made to enlist the aid of all farm groups in the organization of health councils over the nation.

Doctor Crockett has been a member of the Association's House of Delegates since 1929, and, as chairman of the rural health committee, is in demand at all times as a speaker before farm groups over the country.

The meeting was closed with a panel discussion on community health councils, led by Miss Gertrude Humphreys, of Morgantown, state leader, home demonstration work, agricultural extension service. The discussion resulted in a full scale airing of views concerning what can be done in the way of the formation of health groups for the purpose of bringing about an improvement in health conditions in rural communities and our smaller towns and villages.

Several members of the audience submitted questions and entered into the disussion after the questions were answered by members of the panel.

Immediately before adjournment, the conference voted unanimously to recommend that a consultation service on community health be established within the state, and it was suggested that the project could well be organized within the agricultural extension service of West Virginia University or the State Department of Health.

The motion was made by Dr. Frank J. Holroyd, who stated that a community health consultant would enable rural areas to have expert advice in formulating plans for an overall extension of health services.

Almost without exception, the speakers on the program recommended the construction of community health centers in rural areas where the shortage of doctors and nurses is most pronounced.

COUNCIL MEETING AT PARKERSBURG

The fall meeting of the Council of the West Virginia State Medical Association is being held at Parkersburg as this issue of the Journal is on the press (October 28). Besides the members, the meeting is being attended by the new officers and councillors who will assume their duties January 1, 1952.

MLB IN WINTER MEETING, JANUARY 7-9

The regular winter meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, January 7-9, 1952, for the purpose of examining applicants for license to practice medicine in West Virginia.

AMA DUES, 1950 AND 1951

Some of the members of the West Virginia State Medical Association who have also been active members of the American Medical Association for many years, and who paid AMA dues for 1951, but did not pay such dues for the year 1950, are being notified by the American Medical Association that their dues for 1951 cannot be accepted so long as they remain delinquent for the year 1950.

The headquarters offices of the West Virginia State Medical Association has been notified that this action is being taken in accordance with the regulations set up for the collection of AMA dues.

The payment of AMA dues in 1949 was on a voluntary basis. However, dues of $25.00 per year against all members were levied in 1950, and the same assessment of dues holds good for 1951.

Members elected after July 1, 1951, are required to pay but a half year's dues.

Honorary members of the West Virginia State Medical Association are not required to pay state dues, but so long as they remain in active practice such members are required to pay AMA dues to remain in good standing, unless it is certified by the local society that the payment of such dues "would constitute a financial hardship."

Members who have retired from active practice, and those in actual training for not more than five years after graduation from medical school, may also be excused from the payment of dues.

Payment of AMA dues for 1951 entitles a member to a subscription to the JAMA without extra charge, but active members who are excused from the payment of dues will not receive the Journal unless paid for at the regular subscription rate of $15.00 a year.

ALRO SOCIETY SECTION MEETING

A meeting of the Southern Section of the American Laryngological, Rhinological and Otological Society will be held at the Academy of Medicine in Atlanta, Georgia, January 14, 1952.

The following program will be presented at this one-day meeting:

"The Problem of the Preschool Deaf Child."—John E. Bordley, M. D., Johns Hopkins Hospital, Baltimore.

"Bleeding Following Tonsillectomy."—Samuel L. Fox, M. D., Baltimore.

"The Diagnosis and Treatment of Acute Subdural Abscess Secondary to Frontal Sinusitis."—V. K. Hart, M. D. and William Pitts, M. D., Charlotte, North Carolina.

"Cancer of the Larynx."—Julius W. McCall, M. D., Cleveland.

"Glomus Jugularis Tumor of the Middle Ear."—Harry Rosenwasser, M. D., New York City.

"Recent Advances in the Treatment of Facial Paralysis and Bell's Palsy."—Joseph A. Sullivan, M. D., Toronto, Canada.

All members of the medical profession have been invited to attend the meeting. There will be no registration fee. Further information concerning the program may be obtained by writing to Dr. Lester A. Brown, 137 Doctors Building, Atlanta, Georgia.

ARCHITECTS PREPARING LAY-OUT OF MEDICAL CENTER AT MORGANTOWN

A complete development plan for the new four-year school of medicine, dentistry and nursing at West Virginia University will be prepared by the Chicago firm of Schmidt, Garden & Erickson, for the Board of Governors of West Virginia University. Announcement of the appointment of this mid-west architectural firm was made the middle of October by Dr. Irvin Stewart, president of the University, who stated that the firm had served as architect for more than a hundred hospitals and several medical schools, particularly in the south and west.

Under the arrangements made by the Board of Governors, the work of the firm will be limited to a "lay-out" of the tract of 145 acres which will be used as the new medical center. Actual sites will be designated for buildings on the new campus, including a medical, dental and nurses training school, a teaching hospital, dormitories for students, a hotel for ambulatory patients and members of their families, and a specialty hospital with allied units. The firm will also recommend locations for necessary streets, roads and parking areas.

Members of the firm are expected to confer immediately with President Stewart and members of the Board of Governors, and it is expected that actual work on the planning project will get under way early in November.

According to Doctor Stewart, the contract with the Chicago architectural firm does not include the actual drawing of plans for buildings. This matter will be given attention by the Board of Governors after the formal report on the lay-out is submitted.

AMERICAN UROLOGICAL ASSOCIATION AWARD

The American Urological Association offers an annual award of $1000.00 (first prize of $500.00, second prize $300.00, and third prize $200.00) for essays on the result of some clinical or laboratory research in urology. Competition is limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Chalfonte-Haddon Hall, Atlantic City, New Jersey, June 23-26, 1952.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hands before February 15, 1952.

COMPLETES PG COURSE IN ANESTHESIOLOGY

Dr. Arkie B. Bowyer, of Charleston, has completed a postgraduate course in anesthesiology at the Massachusetts Memorial Hospitals, in Boston. The course, which consisted of lectures and supervised anesthesia, was conducted by Dr. Julia A. Arrowood, chief of anesthesia service, Massachusetts Memorial Hospitals and Boston University Medical School.

RELOCATIONS

Dr. Eugene M. Frame, formerly of Winona, has located at Jacksonville, Florida, where he will engage in the practice of his specialty of pediatrics. He has just recently completed postgraduate work in pediatrics at the University of Virginia School of Medicine, Charlottesville.

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Dr. Robert I. Fleming, of Northfork, has moved to Amonate, Virginia, where he will continue the practice of industrial medicine.

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Dr. Robert L. Brown, of Charleston, who recently completed a residency in internal medicine at Charleston General Hospital, has moved to Great Falls, Montana, where he has accepted a staff membership at the Great Falls Clinic.

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Dr. L. H. Trippett, Jr., who has been located at Earling since 1945, has moved to Amigo where he will continue in industrial practice.

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Dr. William H. Price, of Chattaroy, has moved to Williamson, where he will continue in general practice.

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Dr. George F. Grisinger, Jr., of Charleston, who has been serving a residency in radiology at Jackson Memorial Hospital, Miami, Florida, has located at Dunedin, in that state, for the practice of his specialty of radiology. His address there is Mease Hospital.

THE GERONTOLOGICAL CONGRESS

The second International Gerontological Conference, held in St. Louis, September 9-14, 1951, was the high water mark of gerontology. Almost five hundred delegates representing fifty-two nations were in attendance.

All phases of the problems of aging were discussed, especially biology, medicine, psychology and employment. Stress was laid on the fact that aging and the increment of the percentage of aged among populations is a global problem rather than limited to a few areas, although it is most acute in the U. S. A. and western Europe. Generally speaking, the better the health and medical service of a country, the greater the volume of its gerontological problems.

The only West Virginia doctor appearing on the program was Dr. Walter E. Vest, of Huntington, who presented a paper on "Shakespeare's Knowledge of Aging."

The following officers were elected for the ensuing year: President, E. V. Condry, M. D., St. Louis; first vice president, Leon Brull, M. D., Liege, Belgium; second vice president, Torban Geill, M. D., Copenhagen, Denmark; secretary, Marjory Warren, M. D., London, England; and treasurer, Ambrosius Von Albertoni, M. D., Zurich, Switzerland.

The annual meeting in 1954 will be held in England at a time and place to be announced later.

DR. HOWARD R. SAUDER, OF WHEELING, ELECTED HEAD OF HEART ASSOCIATION

Dr. Howard R. Sauder, of Wheeling, was elected president of the West Virginia Heart Association at the annual meeting held in Morgantown October 5. He succeeds Dr. R. J. Condry, of Elkins.

Dr. W. Fred Richmond, of Beckley, was named president elect of the Association, Dr. Clark K. Sleeth, of Morgantown, vice president, and Dr. William E. Bray, Jr., of Huntington, secretary. Mr. R. E. Plott, of Charleston, was reelected treasurer.

Mr. William G. Thompson, prominent attorney of Montgomery, and member of the Board of Governors of West Virginia University, was reappointed state campaign chairman for the 1952 Heart Fund drive. The appointment was made by the board of directors at the pre-convention meeting in Morgantown.

The meeting was more largely attended than any similar annual meeting in the past. All classes in the medical school were dismissed so that students might attend the afternoon session. This is the first time that this step has been taken, and it was indicated after the meeting that medical students would be asked to attend meetings held in Morgantown in the future.

Dr. R. J. Condry presided at the afternoon session, which featured addresses by Dr. Louis N. Katz, of Chicago, president of the American Heart Association, and Dr. Robert Taylor, of the Cleveland Clinic, Cleveland.

Doctor Katz's subject was "The Dynamics of Pulmonary Embolism," and Doctor Taylor discussed "Electrolyte and Fluid Balance."

Following a social hour, the annual banquet was held at the Hotel Morgan at 7:30 o'clock, with Dr. R. J. Condry as toastmaster. The guest speaker was Dr. Louis N. Katz, who discussed very interestingly the work of the American Heart Association.

The members of the Woman's Auxiliary to the Monongalia County Medical Society were hostesses at a tea Friday afternoon honoring the wives of doctors attending the meeting.

During the meeting, heart association officials presented Mr. Floyd B. Cox, superintendent of Monongalia County schools, with a supply of pamphlets on heart disease for distribution to the teachers of the Monongalia schools.

STERILITY RESEARCH AWARD

The American Society for the Study of Sterility has announced the opening of the 1952 contest for the most outstanding contribution to the subject of infertility and sterility. The winner will receive a cash award of one thousand dollars, and the essay will appear on the program of the 1952 meeting of the Society. Essays submitted in this competition must be received not later than March 1, 1952. For full particulars, address The American Society for the Study of Sterility, 20 Magnolia Terrace, Springfield, Massachusetts.

MEDICAL STUDENTS TO PUBLISH JOURNAL

The first issue of the Journal of the Student American Medical Association, a 72-page publication, will make its appearance in January, 1952. According to Russell F. Staudacher, the executive editor, the new Journal will be published nine months of the year (omitting July, August and September when schools are closed). It will have a circulation of more than 33,000. It will be sent to 26,191 medical students and approximately 8,000 interns.

The Journal's contents will be approximately one-half editorial and one-half advertising. About 80 per cent of the editorial space will be divided equally between scientific and socio-economic articles. The remaining space will be used for special features. These will include a newsletter, tightly-written items of interest to medical students and interns, such as new pharmaceuticals, equipment and instruments. There also will be book reviews, a question-and-answer page, letters to the editor, editorials, a diagnostic problem, and a pictorial feature on a medical school.

The staff will include Walter H. Kemp, Chicago, managing editor; Philip Corso, a senior at Tufts College Medical School, Boston, student editor; and Thomas R. Gardiner, Chicago, advertising director. Headquarters will be at 535 North Dearborn Street, Chicago 10, Illinois.

The Student American Medical Association, organized in Chicago in December, 1950, is composed of medical students in a majority of the 79 medical schools of the United States.

NATIONAL FOUNDATION FELLOWSHIPS

The National Foundation for Infantile Paralysis has announced the availability of a limited number of additional postdoctoral fellowships to candidates whose interests are research and teaching in medicine and the related biological and physical sciences. The fellowships cover a period of from one to five years, and stipends range from $3600 to $7000 a year.

Institutions which accept fellows receive additional compensation for expenses incurred in relation to their training programs.

Selection of candidates is made by a fellowship committee composed of leaders in the fields of research and professional education. The designation "Fellow of the National Foundation for Infantile Paralysis" will be given to successful candidates.

Complete information concerning qualifications and applications may be obtained from Division of Professional Education, The National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

DOCTOR GRECO WITH ARMED FORCES

Dr. Ray S. Greco, of Cove Station, Weirton, was called to active service in the Air Force the Middle of October. He holds the rank of first lieutenant in the medical corps, and is stationed at Gunter Field, Montgomery, Alabama.

MRS. GRAYCE S. HOKE REELECTED PRESIDENT OF NURSES ASSOCIATION

Mrs. Grayce S. Hoke, of Charleston, was unanimously reelected president of the West Virginia State Nurses' Association at the annual meeting held at the Daniel Boone Hotel, in Charleston, October 11-13.

Miss Elizabeth Criss, of Fairmont, was elected first vice president, Miss Ann Henshaw Gardniner, of Martinsburg, second vice president, and Mrs. Lavinia Horn, of Wheeling, secretary-treasurer. Sister Mary Ruth, of Clarksburg, Mrs. Margaret King, of Charleston, and Mrs. Genevieve McKee, of Parkersburg, were named members of the Board of Directors.

Dr. Sobisca S. Hall, of Clarksburg, president elect of the West Virginia State Medical Association, was toastmaster at the banquet on Thursday evening, October 11. Dr. Leo Simmons, of New York City, social anthropologist with the Russell Sage Foundation and visiting professor of anthropology in medicine and nursing at New York Hospital, Cornell Medical Center, was the guest speaker. His subject was, "The Human Element in Nursing Care."

At the opening session on October 11, Mrs. Grayce S. Hoke, the state president, told the more than 400 delegates registered that West Virginia faces a most formidable task in providing nursing care for patients in hospitals. She said that not only do nearly 40 per cent of the student nurses in West Virginia leave school during their three years of training, but that approximately two out of every three graduate registered nurses leave the state to accept more favorable positions in other states.

Mrs. Hoke also said that the greatest need for nurses is in the field of institutional care where at the present time state mental and tuberculosis hospitals have but approximately 10 per cent of the nurses they need for the care of patients.

She said that the one bright spot on the nursing horizon is found in the field of office nursing, where applicants are almost sufficient in number to meet present needs.

Mrs. Hoke also said that at the present time the hospitals in West Virginia employ 2,375 nurses to take care of the daily patient load of more than 12,000 patients. In addition, 885 nurses are on private duty, 420 doing office nursing, 177 being employed in industry, and 171 having positions in public health work.

DR. FOLEY ON STAFF AT WVU HEALTH CENTER

Dr. John M. Foley, of Fairmont, has accepted appointment as an assistant physician at the student health center at West Virginia University in Morgantown.

Dr. Foley received his B. S. degree at the University in 1948 at the completion of his first two years in medical school, and was graduated from the Medical College of Virginia, Richmond, in 1950. He served his internship at the U. S. Naval Hospital, Portsmouth, Virginia, and was licensed to practice medicine in West Virginia in July, 1951.

MRS. V. E. HOLCOMBE TO BE INSTALLED HEAD, SOUTHERN MEDICAL AUXILIARY

Mrs. V. Eugene Holcombe, of Charleston, will be installed as president of the Woman's Auxiliary to Southern Medical Association at the 27th annual meeting which will be held in Dallas, Texas, November 5-8, 1951. She was named president elect at the annual meeting in St. Louis last November.

Mrs. Holcombe, who will be the second West Virginian to be elected president of the Southern Medical Auxiliary, is a past president of the Woman's Auxiliary to the American Medical Association. She also served as president of the West Virginia auxiliary in 1940. She has always been active in auxiliary affairs, and last year completed a term as vice president of the Southern Medical Auxiliary.

Mrs. John P. Helmick, of Fairmont, served a term as president of the Southern Medical Auxiliary a few years ago.

NURSING NEEDS IN WEST VIRGINIA

With the completion of the Survey of the West Virginia Nursing Needs and Resources by Miss Faye Abdellah, of the United States Public Health Service, it is painfully brought to mind that nursing within our state is most inadequate both in quantity and quality.

Current estimates show that 2,200 nurses are needed in West Virginia to meet just the minimum civilian nursing needs. This estimate does not include those required for our expanding military demands or Civil Defense. At the present time, with better health instruction and greater demand for hospital care for all types of illnesses, the shortage is becoming more apparent. Not only are there inadequate numbers of nurses for hospital duty, but the number for public health follow-up is woefully short—in fact, completely absent in two of our counties. This all results in chaotic standards of care and dissatisfaction for both the patient and the nurse.

However, the present picture could be much improved if West Virginia were not losing a large percentage of her nurses to other states where personnel practices, working and living conditions and educational opportunities are more favorable. Better practices within the state would stabilize many staffs.

Until more become aware of the existing circumstances, the situation will tend to become worse rather than better. The attention of the public must be called to this unbiased survey—bald statements of fact showing the increasing dangers in the health picture of West Virginians. A well informed general populace, fully acquainted with the facts as they now exist, will bring forth action. Complete understanding and cooperation of all health personnel and educators is, of course, essential. Nursing, the vital community commodity that it is, cannot continue to be ignored.—Elizabeth Gurney in The Weather Vane.

It is often better to do nothing than to do one's best.—The Lancet.

"ALLOXAN AND DIABETES" TOPIC FOR DISCUSSION AT CHARLESTON MEETING

R. Stuart Tipson, Ph. D. and D. Sc., of Pittsburgh, who is associated with the department of organic chemistry at the Mellon Institute, will be the guest speaker at a meeting of the American Chemical Society, which wil lbe held at the North Charleston Recreation Center, in Charleston, Tuesday evening, November 13, at eight o'clock. His subject will be, "Alloxan and Diabetes."

Doctor Tipson received his degrees in England and at the University of Birmingham. Before locating in Pittsburgh he conducted research at McGill University and at the Rockefeller Institute for Medical Research. He is the author of more than seventy scientific papers.

According to Mr. Nelson R. Eldred, of the Research and Development Department of Carbide and Carbon Chemicals Division, South Charleston, the speaker will discuss progress that has been made in determining the relationship of diabetes mellitus and alloxan "which is formed in the body under either normal or abnormal conditions."

Since the topic to be discussed is undoubtedly of interest to the medical profession, a general invitation to attend the meeting has been extended to the members of the West Virginia State Medical Association.

NATIONWIDE DIABETES DETECTION DRIVE

The Diabetes Week campaign which will be observed over the country November 11-17, 1951, will, according to the American Diabetes Association, be more intensive and more effective than ever before, as more organizations pledge their support.

Diabetes committees have been set up by 28 state medical associations and by over 500 county medical societies.

The program for the 1951 campaign has as its goal the screening of as many people as possible for signs of diabetes, and for the fourth time a nationwide "Diabetes Detection Drive" will be spearheaded by the American Diabetes Association.

The diabetes committee of the West Virginia State Medical Association is headed by Dr. George P. Heffner, of Charleston, and the other members are Drs. O. H. Brundage, Parkersburg, M. L. Hobbs, Morgantown, Richard V. Lynch, Clarksburg, William A. Thornhill, Jr., Charleston, and Paul P. Warden, Grafton.

The president of the West Virginia Diabetes Association is Dr. William M. Sheppe, of Wheeling, and the other officers are as follows: President elect, O. H. Brundage, Parkersburg; vice president, Marion Jarrett, Charleston; secretary, John H. Gile, Parkersburg; and treasurer, Richard N. O'Dell, Charleston.

DR. T. G. REED DEFENSE BOND CHAIRMAN

Dr. Thomas G. Reed, of Charleston, has been named Defense Bond chairman of the West Virginia State Medical Association. The appointment was made by Dr. Frank J. Holroyd, the president, who was requested by the treasury department to name a chairman for his professional group.

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INFECTIONS OF THE GENITO-URINARY TRACT*

By J. A. CAMPBELL COLSTON, M. D.†
Baltimore, Maryland

Infection of the genito-urinary tract is, of course, a very wide field which would take a great deal of time to cover thoroughly. I know of no other field in medicine to which the advances of the past twenty years have contributed so much and in which they have so modified the therapeutic results. I shall make no attempt to include in this discussion specific infections such as gonorrhea or tuberculosis and shall limit myself to infections caused by the various types of cocci and gram-negative bacilli.

If properly studied the vast majority of these cases can be successfully treated by the general medical man without the aid of urologic advice. However, it is essential for the proper management of these cases that a careful examination of the genito-urinary tract be made. Urologists are seeing far too many cases in which one of the modern antibiotics has been prescribed in the presence of urinary infection, and no attempt made to even roughly determine the identity of the infecting organism or to exclude the possibility of factors such as congenital anomaly, obstruction, foreign body, et cetera, which will in general preclude the possibility of elimination of the infection unless these factors are controlled.

I should like to condemn particularly the injudicious administration of penicillin in these cases because, as you all know, sensitivity to this drug may be built up to such a degree that it can no longer be tolerated by the particular individual, which may be a serious factor should some occasion arise later in which some other infection, such as pneumonia, might be acquired for the treatment of which penicillin would be the drug of choice.

Another instance of injudicious therapy is in the administration of streptomycin. It is well known that by inadequate doses of this antibiotic certain organisms will develop resistant strains whereas the original infecting organism may have been very sensitive to streptomycin and could have been completely eliminated had adequate doses been used at the onset of therapy.

The infections occurring in the normal, unobstructed urinary tract in the absence of foreign bodies are, generally speaking usually amenable to modern methods of therapy so that the preliminary examination must be carried out to a sufficient degree to eliminate the possibility of these complicating factors. The general physical examination is, of course, essential and often will give valuable information as to the physical status of the patient and will indicate factors which may play an important part in therapy.

In the examination of the abdomen demonstration of tenderness in the kidney regions may be especially significant and of course palpation of an enlarged kidney will indicate the necessity for further studies. A distended bladder usually can be felt except in cases in which the abdomen is unduly thick. Examination of the external genitalia is essential; the demonstration of a urethral discharge may indicate the cause of the cloudy urine and miscroscopic examination of

*Presented before the 84th Annual Meeting of the West Virginia State Medical Association at White Sulphur Springs, July 21, 1951.

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this discharge is mandatory. Evidence of recent or old infection of the epididymes or vasa is significant and will point to the genital tract as the source of the infection. The time honored three-glass test of the urine gives additional information as to the location of the infection.

Chemical examination of the urine may reveal the presence of hitherto undiscovered diabetes which must be course be controlled by appropriate dietetic or insulin therapy if successful elimination of the urinary infection is to be attained. Examination of the urine must include microscopic studies of centrifuged specimens including gram stains. By these essential studies the presence or absence of red blood cells can be demonstrated and the number of white blood cells present will be approximatly ascertained. The gram stain will determine whether the infecting agent is a coccus or bacillus which is, of course, of paramount importance in the institution of therapy. Cultures of the urine should be taken but it is not necessary to wait until the laboratory results have been reported before instituting therapy; these cultures are invaluable in cases in which the infecting organism proves to be resistant to the first therapeutic agent instituted.

Examination of the prostate is then carried out and the demonstration of decreased tonus of the anal sphincter may be the first indication of disease of the central nervous system. The character of any enlargement of the prostate gland is easily determined with special reference, of course, to areas of marked induration which we designate as third degree, which finding is very suggestive of malignant disease.

The microscopic examination of prostatic secretion expressed by gentle pressure should never be neglected and will sometimes reveal a hitherto symptomless and silent inflammatory process in the prostate as the source of the urinary tract infection by the demonstration of marked increase in white blood cells and desquamated epithelial cells under the microscope with or without organisms.

It is essential that the presence of urinary obstruction be eliminated so that after the patient has emptied his bladder as completely as possible catheterization, carried out under strictly aseptic conditions, can determine the presence or absence of residual urine.

To complete the study, excretion urography is an essential procedure in the evaluation of any type of infection of the genito-urinary tract. The presence or absence of foreign bodies, particularly calculi, is determined and an excellent approximation of the functional capacity of the kidneys is demonstrable.

The demonstration of absence of function on one side, evidence of varying degrees of obstruction of the ureters or at the ureteropelvic junction and filling defects indicative of the presence of tumor and numerous variations from the normal are in many cases definite indications for cystoscopic and retrograde studies.

The ease with which excretion urography can be carried out and the invaluable information which it gives us in the study of these cases never fails to impress those of us who were faced with these problems before the introduction of excretion urography. In those days, in the absence of the information now so easily attainable, we were often forced by circumstances to carry out retrograde studies of the upper tract, so often a painful procedure, but necessary to obtain the information which is now so readily available.

These necessary examinations of the genito-urinary tract can be completed in a relatively short period of time and are essential, as has been emphasized before, to eliminate complicating factors which may require surgical intervention before attempts to eradicate the infection can have any chance of success. When examination has demonstrated that none of these complicating factors is present, treatment of the infection can be safely instituted without waiting for the culture reports from the laboratory.

Again, those of us who were called upon to treat these infections before the institution of modern methods will marvel and rejoice in the astounding results which often can be obtained by such simple therapeutic methods.

Before the sulfonamide era only relatively ineffectual agents for the elimination of these infections were available. Urotropin (hexamethylenamin) was one of the drugs most commonly in use, depending for its action on the liberation of formaldehyde in the urine. In those days this drug was certainly of considerable value, often in controlling the progress of the infection and in some cases, indeed, completely eradicating it. Hexylresorcinol also was effective in some cases of coccus infections and there were many drugs introduced by numerous chemical companies most of which were designed to produce some fantastic color in the urine which often had a distinctive, valuable psychologic effect.

Young was one of the first to attempt to actively combat these infections by a *magna sterilisans* using intravenous injections of mercurochrome. In a few cases it was possible to elimi-

nate the infection by this drastic therapy and it is difficult to explain the favorable results obtained except by some generalized reaction, as the intravenous administration of mercurochrome often was accompanied by shaking chills and high elevation of temperature. It should be recorded that Young was so imbued with enthusiasm as to the efficacy of this treatment that he forced his rather reluctant associates on several occasions to administer to him, in the hope of eliminating an upper respiratory infection, far larger doses of this drug than he would have dared to give his patients.

It should also be recorded that after this heroic treatment his urine continued to show varying degrees of albuminuria and the presence of casts indicating that at least some degree of irreparable kidney damage had been done. However, in that pre-sulfonamide era these cases of persistent urinary tract infection often were treated by ureteral catheterization and dilatation which sometimes did clear up a case due to a mild degree of ureteral obstruction. Pelvic lavage was often carried out, usually with varying strengths of silver nitrate solution and with other antiseptics in common use at that period, often resulting in severe reactions and temporary incapacitation. Attempts to eliminate these infections by irrigations of the mucosa of the pelvis of the kidney can be compared with similar methods which were then in vogue for the treatment of gonorrheal infections and in both these methods it is probable that the harmful results often encountered outweighed the good results which sometimes occurred.

The source of many urinary infections is still a debatable subject. However, there is of course overwhelming evidence that some focus of infection in the body often is responsible. Whether the infecting agent enters through the blood stream or the lymphatic system is also debatable but it is obvious to all of us in the present state of our knowledge that evidence of focal infection such as the tonsils or teeth should be eliminated if possible. However, many cases of persistent sinus infection can never be completely cleared up and, similarly, infections of the prostate and seminal vesicles can in some cases be eliminated only by surgical measures, the extent of which would be a contraindication.

In some cases the gastrointestinal tract has been blamed as the source of some infections of the genito-urinary tract by direct spread of organisms through the lymphatics, and much has been written on this subject. The excellent results in the elimination of renal infections by the institution of such intestinal antiseptics as succinylsulfathiazol and sulfaguanidine are clinical evidence that the lower intestine may indeed be in many cases the source of these recurring infections.

When the evaluation of the genito-urinary tract as outlined indicates that an infection is uncomplicated by congenital anomaly, obstruction or the presence of foreign bodies, treatment can be instituted without waiting for the results of cultures. It has been our custom to institute treatment with gantrisin. (3, 4-dimethyl-5-sulfonamide-isoxazole No. 445), usually 3 or 4 Gm. per day in divided doses regardless of whether the gram stain showed coccus or bacillary infection because we have found that many of the cocci are extremely sensitive to the sulfonamides. If the gram stain shows that a coccus is present and if there has been no response to this therapy after a few days, it is advisable to discontinue administration of gantrisin and institute penicillin in doses of 300,000 units every six hours. In some cases of coccus infections prompt elimination of the organisms will follow the administration of neoarsphenamine Gm. 0.3. If a bacillary infection is present which does not respond to gantrisin therapy, it is best to substitute aureomycin in doses of 250 mg. every 6 hours or terramycin in doses of 500 mg. every 6 hours.

If the infection responds promptly and the urine becomes clear and free from organisms and pus cells on microscopic examination, we feel that it is most important to continue therapy with reduced doses for a considerable period of time because, as is well known, these infections are most likely to recur. If the infection has been eliminated by gantrisin, this drug should be continued in daily doses of 1 Gm. for at least three to four weeks, therapy then discontinued and the patient instructed to return for weekly examinations of the urine to be sure that the infection has not recurred. If the infection has been eliminated by penicillin, aureomycin or some other antibiotic, a similar plan of therapy of reduced dosage should be followed.

Infections which recur after their temporary eradication indicate that some focus of infection elsewhere in the body is at fault and a search for this focus should be instituted for the purpose of its eradication if possible. In some cases it may be necessary to continue small doses of the appropriate antibiotic over long periods of time and in these small doses the therapy usually is well tolerated.

Illustrating the necessity of long continued therapy was the case of a retired surgeon in which an acute bacillary infection of the urine developed, superimposed upon a moderate de-

gree of benign prostatic hypertrophy. The accompanying acute congestion of the prostate gland resulted in acute retention; catheter drainage was instituted, sulfadiazine therapy (4 Gm. per day) administered, the infection rapidly cleared up, and the obvious congestion of the prostate diminished so that when the catheter was removed relatively normal urination was regained without obstruction and with no residual urine. Sulfadiazine therapy was continued for a few days, then omitted, and within ten days the urinary infection recurred but there was no retention. The infection responded again promptly to sulfadiazine but recurred again when the drug was omitted. After numerous trials it was found that infection would recur after a period of ten days had elapsed without treatment. No obvious focus of infection could be found on physical examination.

After the regularity with which infection invariably recurred when therapy was discontinued had been repeatedly demonstrated, it was decided to give small doses of sulfadiazine indefinitely. The recurrent infection was then eliminated by sulfadiazine 4 Gm. per day, the dosage being reduced gradually to 0.5 Gm. per day, and it was found that under this minimal dosage the urine remained clear and free from infection whereas if the drug was omitted infection would invariably recur in approximately ten days.

The patient continued to take 0.5 Gm. of sulfadiazine per day over a period of four or five years until his death from hypertensive cardiovascular disease. During this time the urine remained clear and free from pus cells and there were no further episodes of urinary obstruction nor evidence of reaction to the continued therapy and, aside from a trace of albumen, repeated examinations of the urine showed no casts nor red blood cells nor any other evidence of irritation of the kidney parenchyma. We have instituted this same form of continuous therapy with other antibiotics such as penicillin and aureomycin in several other cases of recurring infection. While it might be argued that patients so treated might be compared to a drug addict yet, in our opinion, the ease with which recurrence of the infection can be prevented and the lack of any reaction to these small doses of the drug amply justify this method of treatment; in a small series of cases we have not yet encountered the development of drug resistant strains of the infecting organism.

In urinary infection which proves resistant to this more or less hit-or-miss but which we feel thoroughly justified plan of therapy, sensitivity tests of the infecting organisms must be carried out by careful laboratory studies and when the results of these tests are available the antibiotic to which the infecting organism is most sensitive is, of course, chosen. However, unfortunately, in some cases these sensitivity tests cannot be absolutely relied upon and also unfortunately, there will be found some organisms, particularly strains of enterococcus, Ps. aeruginosa and Proteus, which will be found totally resistant to all types of antibiotics at present available. In some of these cases recent reports have indicated that various combinations of the antibiotics such as penicillin, aureomycin, streptomycin and terramycin may be more effectual than the administration of one of these drugs alone. However, undoubtedly an occasional case of uncomplicated urinary tract infection will be found in which it is impossible to eliminate the infecting organism by any method which is at present available. Certain types of enterococcus infection which cannot be eliminated by the antibiotics may sometimes be controlled by administration of mandelic acid.

Estimation of the blood level at various times during treatment with the antibiotics, considered so essential in the early studies of sulfonamide therapy, is no longer a routine procedure in the Brady Clinic and is now used only in the exceptional case of a severe or unusual toxic reaction. Chloramphenicol is more slowly eliminated than the other antibiotics, hence, it is possible to attain a higher blood level with it. This fact should be remembered in dealing with resistant organisms whose drug sensitivities have been previously determined in the laboratory. Carroll and Brennan state that "for example, some of the organisms were inhibited at a level of 16 mg. per cc., thus requiring a blood level of 4 times this amount, or 64 mg. per cc. This was accomplished by an initial dose of 500 mg. every half-hour for 3 doses. Large doses of the other antibiotics fail to result in high blood levels due to their rapid elimination."

We have had no experience in the use of neomycin in the Brady Clinic but several reports on this new antibiotic have appeared in the recent literature. According to Duncan, Clancy, Walgomal and Berdelman neomycin should be administered intramuscularly at 6 hour intervals, in doses of 4,498 units for infants to 100,000 units. After twenty-four hours, doses of 50,000 to 100,000 units at 12 hour intervals for five to seven days appeared adequate. In the present state of our knowledge this drug should be used with great care on account of the possibility of nephrotoxic and ototoxic effects. These authors report 5 instances of decreased auditory acuity

and 5 of increased blood urea nitrogen in a series 50 cases treated with neomycin.

I should now like to consider briefly the various types of organisms which may be encountered in infections of the genito-urinary tract and to indicate the practical type of therapy which we have found to be most successful in elininating these particular bacteria.

TABLE 1.* RELATIVE FREQUENCY OF ORGANISMS FOUND IN URINARY INFECTION

Escherichia coli	26 Per Cent
Escherichia intermediate	9 Per Cent
Aerobacter aerogenes	14 Per Cent
Paracolon	4 Per Cent
Pseudomonas aeruginosa	15 Per Cent
Proteus vulgaris	13 Per Cent
Alcaligenes faecalis	4 Per Cent
Streptococcus faecalis	6 Per Cent
Staphylococcus	9 Per Cent

*Courtesy of Dr. Grayson Carroll

In table 1 are shown the relative frequency of organisms found in infections of the urinary tract according to Grayson Carroll. It will be noted that bacillary infections occur in 81 per cent, coccal infection in 19 per cent, in this particular study. It will be further noted that pseudomonas aeruginosa and Proteus vulgaris, the two organisms which are most difficult to eradicate, are found in 28 per cent of cases in this series.

The sensitivity of bacteria cultured from urinary tract infections to various therapeutic agents is shown in table 2. As would be expected, penicillin is the most effective antibiotic available for coccus infections with the exception of Streptococcus faecalis which responds best to mandelic acid or to auremycin. It should be noted, however, that many coccal infections will respond to aureomycin, terramycin or to the sulfonamides. With exceptions to be noted, most bacillary infections are best controlled by aureomycin or by terramycin. However, Proteus infections are most susceptible to chloramphenicol (probably on account of the fact that a higher blood level can be attained with this drug on account of its slower excretion)and to the sulfonamides. Ps. aeruginosa, on the other hand, seems most susceptible to either terramycin or to the sulfonamides.

Evaluation of this table would seem to support the preliminary use of sulfonamide therapy in the form of gantrisin in urinary infections as this drug has proved to be at least partially effective against almost all types of infecting organisms. It would also seem apparent that streptomycin will be used less frequently in these non-tuberculous infections because in all cases a more powerful and less toxic antibiotic is available.

In the succeeding tables (3, 4, 5, 6, 7, 8, and 9) are shown the most effective doses for children and adults of the various antibiotics in common use today and the organisms against which they are most efficacious. From an examination of these tables the great value and versatility of the newer antibiotics, aureomycin and terramycin, will become immediately obvious as will also, however, the fact that the sulfonamides remain, in the present state of our knowledge, one of our most effective agents against most types of these infections.

In this survey of the therapeutic problems involved in infections of the genito-urinary tract I have endeavored to emphasize the astounding developments that have been made in the control of these infections in the last decade and to indicate that with the continued research which is being carried out so assidously in so many clinics, there is hope that in the future even more powerful antibiotics may be developed which will enable us to completely eradicate certain types of infection which are resistant to our present therapeutic efforts.

I have tried also to emphasize that these newer methods have almost completely replaced our older and so often ineffectual efforts and that the result of the continuing research has been the

TABLE 2.* SENSITIVITY OF BACTERIA CULTURED FROM URINARY TRACT INFECTIONS TO THERAPEUTIC AGENTS

	Penicillin G	*Streptomycin*	*Aureomycin*	*Terramycin*	*Chloramphenicol*	*Sulfonamides*	*Mandelic Acid*
Beta hemolytic streptococcus	1	3	2	2	0	2	0
Alpha hemolytic streptococcus	1	2	2	2	0	2	0
Streptococcus faecalis	3	0	1	2	2	3	1
Staphylococcus	1	0	1	2	2	2	0
Escherichia coli	0	3	1	1	2	2	3
Aerobacter aerogenes	0	2	1	1	3	2	4
Alcaligenes faecalis	0	2	1	1	3	4	0
Proteus vulgaris	0	2	0	0	1	1	0
Pseudomonas aeruginosa	0	2	0	1	3	1	0

*Modified from Dr. Hugh J. Jewett

TABLE 3. PENICILLIN G

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
100,000 to 200,000 units q. 8 h. i. m. 5 to 7 days Crysticillin fortified (Squibb) 400,000 units i. m. q. d 5 to 7 days	Up to 6 mos., 50,000 to 100,000 units B. D. 6 mos. to 2 yrs., 100,000 to 150,000 units B. D. 2 yrs. and over, 150,000 to 300,000 units B. D.	Beta hemolytic streptococcus Alpha hemolytic streptococcus Staphylococcus	Allergic reactions with or without fever Skin eruptions

TABLE 4. STREPTOMYCIN

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
0.5 Gm. i. m. and sodium bicarbonate 1 Gm. orally B. D. for 5 to 7 days	Total daily dosage 30 to 40 mg./kg. of body weight in 4 equal divided doses	Aerobacter aerogenes Proteus vulgaris Pseudomonas aeruginosa Alpha hemolytic streptococcus	Disturbance of vestibular mechanism manifested by dizziness and/or tinnitus and, if treatment is not interrupted, deafness

TABLE 5. AUREOMYCIN

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
250 mg. by mouth in 4 equal doses per day	50 mg./kg. of body weight per day in 4 equally divided doses intravenously 5 to 10 mg./kg. of body weight q. 6 h.	Escherichia coli Aerobacter aerogenes Streptococcus faecalis Staphylococcus Penicillin-resistant cocci	General malaise; gastrointestinal symptoms, usually mild to severe diarrhea

TABLE 6. TERRAMYCIN

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Reaction
500 mg. by mouth in 4 equal doses	30 to 40 mg./kg. of body weight in 4 equal doses	Escherichia coli Aerobacter aerogenes Proteus vulgaris Pseudomonas aeruginosa Penicillin-resistant cocci	General malaise, usually mild Gastrointestinal symptoms, usually mild

TABLE 7. CHLORAMPHENICOL (CHLOROMYCETIN)

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
1 Gm. orally q. 2 h. for 3 doses; then 1 Gm. 4 times a day for 10 days	50 mg./kg. of body weight per day in 4 equal doses	Proteus vulgaris Escherichia coli	An occasional case of aplastic anemia has been reported, so that frequent blood studies should be made

TABLE 8. SULFONAMIDES (GANTRISIN)

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
1 to 2 Gm. orally in 4 equal doses per day. When infection has been eradicated, dosage should be gradually reduced to 0.5 Gm. q. d.	0.15 to 0.2 Gm./kg. of body weight per day in 4 to 6 equal doses intravenously Sodium sulfadiazine 50 mg./kg. of body weight t. i. d.	Proteus vulgaris Pseudomonas aeruginosa Escherichia coli Aerobacter aerogenes Alpha hemolytic streptococcus Beta hemolytic streptococcus Staphylococcus	Febrile reaction Skin eruption Toxic effects on kidney, especially if dosage is too high, or patient dehydrated

TABLE 9. MANDELIC ACID

Adult Dosage	Dosage for Children	Most Sensitive Organisms	Toxic Effects
Calcium mandelate 3 Gm. orally 4 times a day for 2 weeks	Reduce dosage in accord with body weight in 4 equal divided doses per day	Streptococcus faecalis Escherichia coli	Mild to severe gastrointenstinal symptoms

elimination of much human suffering and the prevention of the serious and often fatal results of these infections.

I have tried furthermore to stress the necessity of continued therapy in small doses, often over a long period of time, to be certain that recurrence of these infections will not take place. There is no reason at all why a large proportion of these infections of the genito-urinary tract should not be handled by the general medical man provided an accurate evaluation of the genito-urinary tract, as I have previously indicated, has been carried out.

The services of the urologist are necessary when resistant types of infection occur and when complicating factors which may require surgical intervention are present.

THE GP AND GERONTOLOGY

The past fifty years has seen the life expectancy of the American rise from forty-nine years, at the turn of the century, to the Biblical three score and ten, in 1950. This rapid increase is chiefly the result of discoveries that gave more babies the chance to grow to maturity, and adults the weapons to delay death to a later day. As a result, we now have a population with a large portion of its people more than fifty years old, presenting a serious problem to the economist, the sociologist, the statesman and the physician.

Our problem, as physicians, is the care of this aging person and calls for more than just the medical considerations of health. We are somewhat handicapped for the moment because this portion of the population was thrust upon us so abruptly that research material has been available for only twenty-five years, more or less, and analysis of the problem is just now getting into high gear. Evidence that the profession is aware of the task ahead of it is in the increasingly frequent reference to investigations in gerontology and we are hearing more and more of doctors who specialize in the diseases of the aging population.

We have long felt that the General Practitioner—the family doctor—by the very nature of his interests and training will evolve into the Geriatrician of the future. He is the one who knows best his patient's behavior pattern, his hereditary background, his social, psychologic and economic environment and the illnesses he has suffered. The family doctor is by habit preventive medicine minded and a trained psychologist by experience.—Krank A. Weiser, M. D., in Detroit Medical News.

MEDICAL EDUCATION A CONTINUING PROCESS

Because medicine is a living art, medical education must always be a continuing process. From the time a person enters medical school until he retires from practice he must have the status of a student, ever alert to the evolution of medical science and practice. Postgraduate study is paramount, since it will demand more time and attention throughout the doctor's life than the medical school curriculum.—Allen T. Stewart, M. D., in Texas St. J. Med.

ACQUIRED HEMOLYTIC ANEMIA*

(Case Report)

By CHARLES H. HILES, M. D.,
Wheeling, W. Va.

Congenital hemolytic anemia has been recognized for many years. The typical blood picture, the increased fragility of the red blood cells, and the family history have helped to differentiate this syndrome from other blood dyscrasias. However, in the past thirty to forty years another type of hemolytic disease not due to previously recognized causes has been described. To this variety the term 'acquired hemolytic amenia' has been applied.

Acquired hemolytic anemia may be acute, subacute or chronic in type. To be certain of the diagnosis in this disease, it must be determined that the condition is not secondary to some recognizable cause, and it is also helpful if it can be demonstrated that the disease does not exist in the immediate blood relatives of the patient.[1] Dacie and Mollison,[2] working on red cell survival studies, first indicated that acquired hemolytic anemia was caused by a hemolysin, while congenital hemolytic anemia was due to an intrinsic defect in the red cell structure (spherocyte). Studies in the past few years in investigations of sera used in testing for Rh antibodies have led to the recognition of sensitized red cells in acquired hemolytic anemia. The anti-rabbit-antihuman serum introduced by Coombs, Mourant and Race[3], now makes it possible to determine adsorbed hemolysins, and has been employed in the recognition of the acquired types of hemolytic anemias.

Dameshek[4] and others have classified the hemolytic anemias as follows:

I. Hereditary	II. Acquired
(a) spherocytic	(a) acute
(b) target cell	(b) subacute
(c) sickle cell	(c) chronic

In their classification the authors separate the congenital varieties as to their intrinsic defects: the spherocyte of congenital hemolytic icterus, the target cell of Mediterranean anemia and the sickle cell of sickle cell anemia. The acquired varieties they classify only on clinical differences but go on to suggest separation on an etiologic basis:

1. Chemicals
2. Infections (toxins)
3. Immune hemolysins and agglutinins
4. Idiopathic (hypersplenic and symptomatic)

An even simpler classification is advocated by Young and Lawrence[5] who suggest dividing the hemolytic diseases into two large groups:

*From the Department of Internal Medicine, The Wheeling Clinic, Wheeling, W. Va.

(a) those due to "extrinsic" causes such as malaria, chemicals, et cetera and (b) those due either to congenital or "intrinsic" causes. The actual cause of the red cell destruction in the "extrinsic" types is in some instances rather obscure[1] but in many instances can be traced to alterations of the chemical structure of the cell[6]. In the congenital varieties of the "intrinsic" type of the defect is in the cell itself. The abnormal shape of the red cell (spherocyte, target or sickle) makes it more vulnerable to destruction[6, 7]. Others[8, 9] feel that stasis in the spleen plays an important role in the destruction and subsequent removal of the red cell. The hemolysins demonstrated by the anti-rabbit-antihuman serum (Coombs' serum) have been found in both the congenital and acquired varieties. These hemolysins are thought by some to be the cause of the red cell destruction in acquired hemolytic anemia[2, 10]. Ponder[6] has summarized the role of the lecithins in the hemolytic diseases. It is now recognized that there are naturally occurring substances which are potentially lytic. These are the fatty acids and soaps from the chyle, the bile salts and fatty acids associated with them, and the soap-like or lysolecithin-like agents in the plasma and tissue juices. These potentially lytic agents in the body are modified by certain proteins and soaps to form a nonlytic complex. Accelerator substances may affect this complex to cause increased lytic activity. It is thought that certain drugs and bacteria act as accelerators rather than as hemolytic agents themselves. A hemolytic episode could occur from a reduction of the normally occurring inhibitor substances or an increase in the accelerator substances. It could also occur when a new or foreign hemolytic agent is introduced, as is seen in most cases of acquired hemolytic anemia. This particular type Ponder considers to be the abnormal lysolecithins. Change in the red cell interior, or cell metabolism, particularly the hemoglobin, characterizes one large group. The changes by the other large group of substances are mainly surface changes, as in the agglutination caused by the agglutinins of the ABO system, the heterophile antibody agglutinins of infectious mononucleosis and the atypical antibodies detected by the antihuman globulin serum.

According to Evans and Duane, the amount of adsorbed antibody on the red cells in cases of acquired hemolytic anemia has been found to bear a direct relationship to the rate of red cell destruction.[10] However, these authors point out that even during remissions these immune globulins still can be demonstrated, which may explain why relapse occurs so readily.

The most accurate index of red cell destruction is found in the amount of urobilinogen excreted[11]. The normal life of the red cell has been found to be 100 to 120 days, after which it is destroyed. For the main part its components are salvaged by the body for manufacture of new red cells. The hemoglobin of the red cell is first changed to hemosiderin and in the liver this is changed to bilirubin. Before passage through the liver cells this is the so-called "bound" bilirubin which produces the indirect van den Bergh reaction. After its passage through the liver cells this becomes "free" bilirubin and produces the direct van den Bergh reaction. From the liver, bilirubin is excreted into the intestinal tract where it is converted to urobilinogen. Normally this is for the most part reabsorbed into the circulation and eventually travels to the liver and kidneys. In the kidneys approximately 1 to 2 mg. per day are excreted under normal conditions and from the intestinal tract 50 to 100 mg. per day in the feces.

The susceptibility of red cells to hemolysis in hypotonic solution usually is considered an index of hemolytic activity. This increased hypotonic fragility of the red cells in congenital hemolytic anemia has been recognized for many years. However, in the acquired variety this will be found in less than half of the cases. Evans and Duane[10] suggest that the increase in hypotonic fragility, when the disease persists after splenectomy, reflects the role of the spleen *in situ* in removing the spherocytic cells from circulation, thus keeping the curve of hypotonic fragility within normal range.

The other manifestations of hemolytic activity (aside from the anemia) usually seen are: (1) splenomegaly, due to the activity of the cells of the reticulo-endothelial system and congestion, (2) reticulocytosis, which may reach 10 to 20 per cent nucleated red cells and polychromatophilia, all reflecting the bone marrow activity, and (3) bone marrow hyperplasia which is mainly erythroblastic.

The case to be presented is one of acquired hemolytic anemia with crisis, followed by partial remission after splenectomy and subsequent reactivation presumably by cold agglutinins. It also points out the difficulties encountered in the management of such cases.

CASE REPORT

R. B., a 38 year old white male, was referred to the Ohio Valley General Hospital, Wheeling, June 20, 1950, by Dr. G. E. Henderson of New Athens, Ohio, because of profound weakness, dizziness and headache. He had worked at his

regular job in an oil refinery until eighteen days before entering the hospital. Elsewhere, because of tarry stools and changes noted on x-ray examination of the intestinal tract, he had been treated for a bleeding peptic ulcer. However, despite vigorous ulcer therapy his symptoms progressed. Upon first admission to the hospital he appeared quite pale but did not exhibit clinical icterus although the icterus index was 20. There were no ecchymotic areas. The liver was not palpably enlarged. The spleen was just palpable beneath the left costal margin and was not tender. The stools were tarry in appearance. Examination of the blood on admission revealed 21% hemoglobin, 1,120,000 RBC, 7,200 WBC, and an icterus index of 20.

The results of gastrointestinal x-ray studies including a barium enema were normal. Despite several whole blood transfusions during the next few days the red blood cell count declined to 780,000 and the hemoglobin to 20%, and the icterus index increased to 26 units.

In consideration of the history of malaria in 1943 and the industrial history of possible exposure to gasoline vapor a hemolytic episode was considered. The fragility of the red cells to hypotonic saline solution was normal, beginning at .42 and complete at .34. There was reticulocytosis of 10%. At this time splenectomy was decided upon. The antihuman globulin serum was not available at this time for performance of the Coombs test. Great difficulty was experienced in obtaining compatible blood for transfusions because of clumping in the major and minor cross matching.

On June 30 splenectomy was performed by Dr. C. D. Hershey. No accessory splenic tissue could be found. The spleen was approximately four times normal size and was a deep reddish-brown in color. It measured 15.5 x 11.5 x 5.5 cm. and weighed 454 gm. On microscopic section the sinusoids and pulp were found to be engorged with erythrocytes, and phagocytosis of blood pigment was noted in the splenocytes. The pathologist, Dr. H. G. Little, considered this to represent hypersplenism with hemosiderosis and chronic splenitis.

On the day following operation the blood count had risen to 1,175,000 RBC, 34% hemoglobin and 14,700 WBC. Forty-three erythroblasts per hundred WBC were seen. The next few days brought marked clinical improvement despite the fact that the blood picture failed to improve as had been hoped. At the time of discharge from the hospital, July 11, 1950, the red blood count was 1,800,000, hemoglobin 35% and reticulocytes 28%.

The patient had gained weight and was feeling much stronger. A moderately severe bout of phlebitis developed in the left arm but disappeared under conservative management. By August 11 the blood count had increased to 2,860,000 RBC with 61% hemoglobin, but the white cells were only 2,700. A febrile episode developed about one week later, associated in a few days with renewed hemolytic activity which, in the course of ten days, had reduced the red blood count to 1,690,000 and the hemoglobin to 40%. The white count was 31,000 but of this number about one-half probably were erythroblasts interpreted as white cells (there were 44 erythroblasts per hundred white cells in the differential cell count).

He was readmitted to the Ohio Valley General Hospital with the diagnosis of acute atypical pneumonia and recurrent hemolytic anemia. The pneumonia subsided in about ten days but the hemolytic episode progressed. It was at this time that it became impossible to find compatible blood for transfusion, and washed red cells were used. The blood count fell to a level of 980,000 RBC with 28% hemoglobin. The Coombs test was positive. Adrenocorticotrophic hormone (ACTH) was given for a period of twelve days in a dosage of 15 mg. every six hours. There was no improvement noted either clinically or hematologically. A test for cold agglutinins was not performed at this time.

Because of the continued unfavorable course the patient was transferred to the service of Dr. Charles A. Doan, Columbus, Ohio, for search for accessory splenic tissue. At the University Hospital in Columbus he was given thorotrast. The localization of the contrast medium in the retroperitoneal region at the upper pole of the kidney suggested the presence of accessory splenic tissue in that area. An operation was performed by Dr. Robert Zollinger. A small group of lymph nodes and two accessory spleens were removed. Histologic examination of this tissue showed excessive phagocytosis by clasmatocytes. Following surgery the red cell survival time of transfused red cells was somewhat increased, but the cold agglutinins which had been present before surgery persisted in high titer.

Quite accidentally it was noted that one cool day while the patient was out walking he had a chill followed by hematuria in the next twenty-four hours. It was therefore assumed that the cold agglutinins were precipitating this hemolytic episode. The patient was advised to go south for the winter months. This was done, but unseasonable cold weather in that area caused further hemolytic episodes. He then returned home and was given several transfusions, and

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the administration of Cortisone was begun. To date he has continued to improve and the last report indicated that his red blood cell count was "over three million."

DISCUSSION

Acquired hemolytic anemia remains a problem in any particular case as regards the mechanism of cell destruction. The presence of antibodies as suggested by the positive reaction to the Coombs test may suggest the type of hemolytic episode but is not specific. In the case presented the antihuman globulin test was positive following splenectomy and after the episode of atypical pneumonia. However, the cold agglutinins seemed to be the specific mechanism of the second hemolytic episode. The value of splenectomy in acquired hemolytic anemia remains doubtful but until recently has been employed in many instances as a last resort in combating the acute hemolytic episode. Wagley[8] and others, by comparing the agglutinability of red cells from the peripheral blood with red cells from the splenic pulp of patients with acquired hemolytic anemia, found the titer of the Coombs test much higher in blood from the splenic pulp. They then suggested that the passive adsorption by the red cells of a substance produced in the splenic pulp (and probably in other organs) may result in increasing local stagnation and injury to the cells. The favorable results sometimes seen following splenectomy in acquired hemolytic anemia perhaps may be explained on this basis. On the other hand, in certain patients, splenectomy seems to have no beneficial effect presumably because other organs share the function of the spleen. The beneficial results of the steroids (ACTH and Cortisone) in cases of symptomatic hemolytic anemia and hypersplenic states suggested their use in acquired hemolytic mechanisms of other varieties[12, 13]. It seems likely that this type of treatment eventually may be preferred to splenectomy, and certainly it offers a means of combating the recurring relapses following splenectomy.

SUMMARY

The mechanisms of hemolysis have been reviewed and the characteristics of acquired hemolytic anemia outlined. A case of acquired hemolytic anemia is presented and the methods of treatment discussed.

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LONGEVITY

The most important factor in cutting down the life span in the past has been the infectious diseases. This has been especially true in infancy. In most instances the communicable diseases have been successfully controlled on both adult and child levels. These facts have been largely responsible for the increasing life span.

If we can find new fields in the realm of preventive medicine we can further lengthen the life expectancy. Medical science and public health are learning more about heart disease, cancer, and the degenerative diseases. They are being rather successful, but the program here is not as spectacular as in the contagious diseases.

How long will this continue? One cannot say, but there are those who say that man can live to be more than a hundred.

One cannot discuss the program of longevity without reflecting upon the effect of the increasing number of elderly people in our communities. Many of these persons are physically fit but they are unable to find work; many of them are in need of diversion, but entertainment and occupation are lacking. It is time we were giving more serious consideration to the problems of the elderly.

Life should be made pleasant for them instead of just being a period of waiting for death as it is in many instances today.—Westchester Medical Bulletin.

A Consultant deals with disease; a practitioner with illness.—The Lancet.

PLAY THERAPY IN PEDIATRIC MALADJUSTMENT

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Play therapy has had a short but eminent history in the treatment of children whose illnesses have a purely psychologic origin. However, this same technic may be of value in ameliorating the debilitating effects which a physical illness may impose on the personality structure of a child. In some cases of organic illness the psychologic symptoms and the symptoms which arise as a direct result of the illness itself may be quite difficult to differentiate. Thus, withdrawal, aggression, abnormal fears, all may appear in the presence of physical disorders, and then serve to reenforce or intensify the existing physical condition. Looking at the problem from another frame of reference, psychologic symptoms which arise as a result of physiologic illness can, without intensifying the original illness, be just as harmful to the child in terms of being the forerunners of neuroses or psychoses.

It is the intent of this paper to cite four case histories, each of which involved a child with some physical illness which apparently engendered the development of psychologic symptoms. It is also the purpose of this paper to show how play therapy can be helpful as a diagnostic instrument and as a therapeutic instrument in the treatment of psychologic symptoms which arise in relation to physical disorders, even in intellectually retarded children.

Play therapy is essentially a process of communication and differentiation. It is communication in that it permits the child to use his own medium of expression to communicate with another person; it is differentiation in that it permits a unique growth experience to evolve. Play therapy utilizes a "play room" equipped with the ordinary, everyday toys with which children play. It is based upon a theoretical assumption that children (like adults who do not know the meaning of certain feelings which they have) have feelings which they do not understand and which they are unable to express verbally. It is further theorized that if the child is able to express his feelings in his own medium of communication (play), is able to be understood, and can then have reflected to him the meaning of his feelings, he will be better able to cope with his own life situation. It is important to note here that the epitome of the philosophy upon which play therapy is based is the belief that all persons regardless of age have within themselves the capacity for restoring harmony to their inner life if given an opportunity to do so in a permissive atmosphere and in their own way. If one can simply conceive of the fact that one may hate his brother or sister but may not understand what the feeling means, the position of the child becomes clearer. That which is not understood causes anxiety. The anxiety then becomes the stimulus for arousing various symptoms. Thus, play therapy deals not with symptoms but with causes of anxiety.

The following cases demonstrate examples of anxiety which apparently have arisen both in regard to feelings aroused by physical causes and feelings which have been aroused by psychologic phenomena.

Case 1.—Cervical Adenitis. J. H. is a boy of 13. His intelligence is "dull-normal." He was referred because of temper tantrums, anxiety, nervousness, uncontrollability and possible homicidal or suicidal tendencies. One year prior to the referral, the patient was treated for cervical adenitis in a hospital. The ordeal was apparently quite a trying one for him, leaving him with a fear of doctors and hospitals. The patient had never been a healthy child. He had rickets at age one and one-half, whooping cough at age two, and was enuretic for a year prior to his referral. The patient's mother was quite ill before the patient was born. She fainted several times during her pregnancy and vomited a great deal. The patient has been taken to a number of physicians for his various illnesses, culminating in the final condition of cervical adenitis as mentioned previously. At the time of referral the patient refused to take medicines, displayed a great fear of needles, hated doctors, was resentful of his mother for taking him to doctors, disliked his sister because she spent much time with the mother in the patient's absence, and was rebellious toward society in general. The patient was discharged after one year in play therapy with complete remission of behavioral symptoms. At the beginning, he was seen in play therapy once a week, and throughout the year was seen at progressively decreasing intervals. In this case the behavioral symptoms at the time of referral were so severe as to preclude this child's adequate adjustment in his home or school environment. During the course of play therapy this patient used a technic found quite often in children. He buried a mother and sister doll under mounds of toys, strangled them, and finally tried to dismember them, thus expressing his aggression toward his family situation. He stuck needles into doctor dolls, re-enacted hospital scenes in which children were severely punished, and gave much vent to aggressive feelings in

general. As these feelings were reflected to him, both verbally and by the therapist's participation in the play, the character of the child's methods changed, until gradually his aggressive play was reduced to the play of the ordinary youngster. This child has apparently had no difficulties with any physical illness since the time of his discharge.

Case 2.—Petit mal, grand mal and hypothyriodism. M. J. is a girl of 10. Intelligence is "borderline." She was referred because of obesity, grand mal and psychomotor attacks (swallowing, loss of consciousness momentarily, irrelevant and purposeless activity, and amnesia), aggressiveness, poor school work and great dependency on the mother. The patient was quite cyanotic at birth, has had seizures since age five, has always been rather lethargic. Within the year before referral, she had become quite aggressive toward people, had done very poorly in school and had an increase in the number of psychomotor attacks. She has four brothers and one sister who apparently are normal. At the time of referral the patient demonstrated fear that she would have a "spell" in school or at the movies. For this reason, she was quite uncomfortable in school (aside from the fact that her low intellectual level precluded her ability to do school work well) and insisted that her mother accompany her to town or any place outside of school. She would not see "scary" pictures because she might have a "spell." She was quite rebellious about taking instruction from anyone other than her mother and was unable to accept many reality situations. At the time of referral the patient had such an aggressive manner and could become so easily angered that she would pass from a state of great irritability into a psychomotor attack. The patient was seen for three years. Medication included 2 grains of thyroid per day, 1½ grains of dilantin with ¼ grain of phenobarbital twice a day, and 7½ grains of glutamic acid eight times a day. She was seen in play therapy sessions at infrequent intervals the first two years, but was seen regularly during the third year. At the time of her discharge there was an apparent complete remission of behavioral symptoms and the patient has had no psychomotor attacks for six months. During the course of play therapy this patient used finger paints to a great extent. Her paintings at first were somber, depressing and apparently a mirror image of the depression which she felt at being unable to do many of the things which other children are able to do without a thought as to whether they will "have a spell." She destroyed dolls of persons of authority and placed toys in very confining and restricted situations. Her play gradually gave more space to these situations and the destruction of dolls ceased. Her paintings utilized more bright colors (reds, yellows and oranges as opposed to blacks, browns and dark blues) as her play progressed. It should be mentioned here that the patient was taking anticonvulsant medications at the time her "tantrums" appeared to precede her attacks.

Case 3.—Neonatal asphyxia. H. J. is a boy of 11. Intelligence is at the "moron" level. He was refered because of poor school work. Other factors present were sibling rivalry, withdrawal symptoms and lack of interest in anything. The patient's mother stated that the patient was quite cyanotic at the time of his birth. The patient had a slow developmental history, not talking until he was three years of age. At the time of referral, the patient demonstrated an apathetic appearance, disinterest in his surroundings and an inability to use what intelligence he possessed. He did not play with other children because he seemed to lack interest in what they were doing. The patient's medication consisted of 7½ grains of glutamic acid eight times a day. At first this child did not play with any of the toys in play therapy sessions, and when he finally did begin to do so, it was quite hesitantly. He was shy about "killing" the father, mother and brother dolls but eventually did it quite readily and then ceased from this activity all together. He used mechanical toys more than any of the others, apparently indicating a rather low intellectual level, since it was easier for him to play with objects already structured than those which were not. The patient was discharged after one year of play therapy, with fairly complete remission in behavioral symptoms; that is, he was playing with children, displayed an interest in his surroundings, and no longer withdrew or was antagonistic towards his siblings. His school work improved somewhat. The patient apparently is adjusting adequately, considering his handicap in intellectual capacity. The patient has eaten poorly since has was an infant but is eating somewhat better now. He recently became a Boy Scout and takes an active interest in the activities of the troop although he is not able to keep up with them in many of their projects. He is continuing his glutamic acid without any further sessions of play therapy.

Case 4.—Myoclonic epilepsy. W. L. is a boy of 9. Intelligence is "borderline." He was referred because of marked restlessness, insomnia, anorexia and inappropriate laughter. The mother stated that he often cried for no apparent reason. At times he repeated certain words and

phrases over and over again. His general health has always been good. At age four he underwent circumcision with repair of an undescended testicle on the right. Until a short time before referral he had slept with his grandfather who was 75 years old and who drank heavily. On several occasions the grandfather came home beaten up and intoxicated. At the time of referral the patient spoke in a monotone which was scarcely audible. He described many events associated with great anxiety which occurred at home, at school, or near his home. Neurologic examination was negative. During play therapy this child's play did not appear to differ significantly from that of an ordinary child of this intellectual capacity. After three months of play therapy, at one week intervals, there was no remission nor change in the patient's symptoms other than that his inappropriate laughter and repetitiousness were very slightly decreased. Considering the fact that play therapy was of no particular help and that the child threw his arms up in the air quite frequently, a diagnosis of nyoclonic epilepsy was eventually made. Three-fourths of a grain of dilantin and ¼ grain of phenobarbital were given to the patient twice a day. There was a sharp and sudden decrease in symptoms. Continuation of play therapy for three more months together with the medication just mentioned aparently brought about a fairly complete remission of symptoms. The medication was continued after the play therapy was ceased and there has been no apparent relapse. The patient seems to be adjusting well to his environment both at home and in school, considering his intellectual handicap. He is actively engaging in constructive activity and appears to be a much happier child than he was at the time of his referral. In this case play therapy was used more as a diagnostic tool in the earlier stages of treatment than as a therapeutic instrument.

DISCUSSION

As stated formerly, it is partially the intent of this paper to point out a way in which psychologic symptoms may aggravate a physical condition. This point is especially indicated in case 2, in which the child's temper tantrums were quite closely related to the psychomotor attacks. Cases 1 and 3 demonstrate how maladaptive symptoms of a psychologic sort may arise secondary to physical causes. Finally, we wish to emphasize that play therapy can be helpful either as a diagnostic or therapeutic instrument and can be of value even in cases of children who are intellectually retarded. Case 4 amply demonstrates the use of play therapy as a diagnostic tool to rule out a basic psychologic disturbance even in the face of negative neurologic findings. All of the cases instance the fact that play therapy can be helpful even in the face of intellectual retardation. In such a case, as in the case of normal intelligence, the value of play therapy seems to lie in the fact that the child is permitted to work through his problems at a rate of speed which is considerable slower than that for most other children. That is, his problems can be worked through, just as in the case of the child with normal intelligence, but the rate is slower. The relationship which the child establishes with his therapist is of paramount importance, of course. This is the explanation of the fact that children playing alone or playing in the presence of other children or adults cannot make the same use of toys because their actions must be understood and elarified by reflecting to them the meaning of what they have communicated. The same acts which occur in the play room may occur over and over again in the children's real-life play, but the play will have no therapeutic value unless it is interpreted to them.

In the foregoing cases the children were unfortunate in that they had a physical problem which served as a springboard for the appearance of psychologic symptoms. The important point to note, however, is that the line of demarcation from physical to psychologic symptoms is so slight as to be meaningless many times. In these instances, formal play therapy can be of great moment in reducing the illness to its basic components.

PSYCHIATRIC SCREENING OF PATIENTS

It is desirable that the general practitioner understands to what extent his patient's illness is colored by the effects of disturbing life situations. Yet, with a routine medical history one will obtain little if any information about the individual's emotional life unless such information is volunteered. It is impossible for many physicians to attempt a psychiatric investigation with a detailed psychiatric history, so a patient's story must be evaluated with the idea of ruling out organic disease.

Emotional problems occur so frequently, however, that a physician should know how to elicit pertinent data concerning the status of a gastrointestinal tract. Thus, he should be able to suspect psychiatric problems just as he might suspect a carcinoma of the sigmoid colon. Once he has a working diagnosis he may then proceed with more detailed studies to substantiate his initial impressions. If this were possible, it is felt that many psychiatric disorders could be recognized in their initial stages when a patient might be most successfully treated, perhaps by the physician himself.—Clay F. Barrett, M. D., in J. Missouri St. Med. Assn.

THE CUTANEOUS MANIFESTATIONS OF LYMPHOBLASTOMA

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Lymphoblastomas form one of the most baffling and complex groups of diseases, yet are among the most interesting and often the most discouraging to treat. They are erroneously considered of infrequent occurrence. This classification composes not nearly so rare a group of diseases when one considers that in New York State from 1940 to 1945 one out of every 16 deaths from cancer was due to one of the lymphoblastomas and that the same held true of one out of every 20 deaths from cancer in a similar period in West Virginia.[1] The genetic relationship pathologically of this group of neoplastic diseases was first pointed out by Mallory[2] in 1914 and later by Warthin[3] in 1927. The frequent occurrence of true dermatologic manifestations in certain forms of lymphatic hyperplasia was noted two years later by Keim.[4]

Since then this group has been generally considered to include lymphosarcoma, Hodgkin's disease, leukemia and mycosis fungoides. Undoubtedy in future classifications the category will be enlarged to include other tumors of the reticulo-endothelial and lymphatic structures.

The lymphoblastomas are generally considered now to be neoplastic tumors of the blood forming organs. They are no longer considered of inflammatory or infectious origin. They resemble other forms of cancer in that they are killers and probably like other cancers are unicentric in origin. They differ from other cancers in that they metastasize with mutiple foci of growth which occur approximately at the same time. They also differ from other forms of neoplasia in their usual lack of rapidly progressive cachexia. In the early phases of the disease the patient often is remarkably well. Some manifestation on the skin, at times a solitary lesion, may be the only distinguishing mark of the disease many months before any other positive clinical or pathologic finding. It is for this reason that the cutaneous symptomatology often is of paramount importance in early diagnosis.

Statistics quoted by various observers indicate that cutaneous expressions of lymphoblastoma occur in 10 per cent to 40 per cent of cases. Of this latter group 10 per cent are specific manifestations, the remainder toxic or nonspecific. Of the leukemias, lymphatic leukemia most often is accompanied by cutaneous changes due to infiltration with hyperplastic hematopoetic tissue; less often is this true in myelogenous leukemia. Of the allied diseases mycosis fungoides is essentially a skin manifestation, while Hodgkin's disease frequently is accompanied by skin changes. It is characteristic of these diseases that there is a metamorphosis of one condition into another. At least the pathologic and clinical findings may at one phase be representative of mycosis fungoides and at some later phase be pathognomonic of lymphosarcoma. A patient having a classical infiltration in the skin representative of Hodgkin's disease may at some later time show a blood picture of lymphatic leukemia. This diagnosis is not infrequently difficult.

DIAGNOSIS

The lymphoblastomas are surpassed perhaps only by syphilis in their ability to mimic many common dermatoses. In addition, the earliest signs may be those of severe pruritis or some nondescript pigmentation that appears months before there are any other significant findings. Aside from the dermatologist's awareness of certain signs in the skin at least suggesting the possibility of lymphoblastomatous disease, a great deal depends upon the phase at which a particular patient is seen. In the aleukemic phase of leukemia there is no hematologic evidence whatsoever of the disease. A biopsy of the skin lesion present at this time may likewise show no evidence of a specific infiltration. If the patient survives sufficiently long, one or both of these means of identification will most likely ensue. Even then the material for study must be obtained during an interval in the disease when the process is manifested by specific changes, whether in the blood picture, in the tissue of the skin biopsy, or in the bone marrow. Once the clinical or dermatologic pattern suggests disease of the hematopoetic system definite lines of investigation are indicated. Some of these studies, especially the skin biopsy and the blood studies, must necessarily be repeated before a definite diagnosis can be established. Helpful diagnostic aids, with brief comment, are listed in the following paragraphs.

Blood Studies.—These may have to be repeated many times before abnormal cells, significant differentials or changes of the total count are found. Special staining technics such as the oxidase stain to determine cells of bone marrow origin and supravital stains for recognition of the myelocytes and myeloblasts, may be required.

Biopsy of the Skin and Lymph Nodes.—Repeated biopsy of skin and lymph nodes may be

*Chief, Dermotology Deportment of The Pock Medical Group, New York. Condensed form of on oddress presented before o meeting of the West Virginia Acodemy of Generol Proctice of Huntington, Moy 27, 1951.

necessary before the microscopic picture presents characteristic pathologic changes. Searching for lymph node changes in mycosis fungoides where the primary pathologic manifestations are to be found in samples from the skin is not an uncommon mistake.

Bone Marrow Biopsy.—This may be necessary to establish a diagnosis in more difficult cases and is a helpful diagnostic procedure.

X-Ray.—In association with lymphoblastoma, changes occur in the bones and may be identified upon x-rays of the skeletal system. These include softening and fractures due to tumor-like involvement of the bone, periosteal elevations about the joints, arthritic changes of an acute type, osteosclerosis and osteomyelitis. Mediastinal tumors of Hodgkin's disease and lymphsarcoma are well known.

X-Ray Therapy.—The ease with which the lesions of mycosis fungoides respond to small superficial doses of x-ray therapy leads the dermatologist at times to employ this aid in the differential diagnosis of other forms of lymphblastoma.

Physical Findings.—An enlarged liver or spleen, as well as generalized or localized lymphadenitis, is helpful additional information that is evidence pointing toward the presence of a lymphoblastoma.

CHART

LEUKEMIA CUTIS

Manifestations on the skin in acute, chronic and subleukemic phases of lymphogenous, myelogenous and monocytic leukemia.

Nonspecific	*Specific*
(Leukamid) Localized or generalized	Localized or generalized
Zoster form	Papules
Herpes Zoster (More frequent in lymphatic leukemia)	Nodules
Urticarial	Plaques
Hemorrhagic Petechial Purpura (Usually in acute stage)	Ulceration
Erythrodermia	Erythrodermia (Occurs frequently on face, scalp, extensive surface of arms and legs, breasts and shoulders)
Exfoliation	
Furunculoid (Hemorrhagic-Ulcerative)	
Mucous Membrane Lesions (Hemorrhagic-Ulcerative)	
Pigmentations	
Lichenification	
Pruritus	

LEUKEMIA CUTIS

Skin changes may appear in all types of leukemia and at any one of its stages whether it be acute, chronic or aleukemic. Two types of lesions, nonspecific and specific, may occur. These two types of manifestation of the disease are sometimes spoken of rather vaguely and need some clarification.

Nonspecific.—The nonspecific eruptions are the so-called toxic manifestations or leukamids on the skin, sometimes referred to as "ids." The pathology is neither characteristic nor diagnostic of a particular disease. However, the appearance of the "ids" on the skin in various nondescript forms is often a clue which makes one suspicious of lymphoblastoma. They are evidence which stimulate further investigation to establish the diagnosis. The eruption of the nonspecific lesions may take a localized or a generalized form. Manifestations are manifold and are enumerated in the chart.

Specific.—Other lesions which may appear in the skin on biopsy show a specific leukemic infiltration upon which a definite diagnosis may be established. These usually are more discrete, definite types of infiltrations in the skin. The forms in which they may present themselves are seen in the chart.

LYMPHATIC LEUKEMIA

The majority of cases demonstrating cutaneous lesions are those of chronic lymphatic leukemia. Small papules occur that eventuate into nodular or occasionally ulcerative lesions. These infiltrations may form a universal erythrodermia at times in which plaques, papules and nodules appear. Ulceration is rare. The sites of predilection are the face, ears and extremities. The hands are frequently involved. The color of the infiltrations vary from pink and reddish to bluish-brown. They may be superficial or subcutaneous with normally colored skin overlying. In the chronic stage diffuse thickened skin may result from leukemic infiltration with no other apparent lesion being present. On pathologic examination this and what appears to be quite uninvolved skin show specific infiltration.

MYELOGENOUS LEUKEMIA

The skin manifestations, though much less frequent in myelogenous leukemia than in lymphatic leukemia, are often similar. The specific eruptions are nodules varying in size from a few millimeters to several centimeters and blue to brownish in color, occurring on the trunk and less often on the arms, legs, face and scalp. They may eventuate in ulceration. There may be one or many lesions occurring over the entire body. The onset may be rapid, and the eurption may evolve very slowly.

MONOCYTIC LEUKEMIA

Although a much more rare form, cutaneous changes occur in about 75 per cent of cases of monocytic leukemia. Two forms have been noted more consistently than any others: (1) a maculopapular eruption, more superficial, which is often generalized and which closely resembles secondary syphilis in its incipiency but which later takes on a characteristic slate-blue color and (2) a shotty papulonodular type in which the lesions lie deep in the corium. This type has a more characteristic feel of deep infiltration. Bleeding of the mucous membranes may occur in monocytic leukemia, with progression to ulceration at times which may occur during the very early or the terminal stage of the disease. The cutaneous infiltrates may advance in firmness and size to the point of ulceration or at other times complete involution may ensue. Exfoliative dermatitis occurs with some frequency.

HODGKIN'S DISEASE

Twenty-five to 40 per cent of cases of Hodgkin's disease show some type of skin change. This ocurs in an earlier age group, with males being affected two to one over females. Generalized pruritus is the most frequent early cutaneous manifestation accompanied by excoriation, lichenification and varying degrees of pigmentation. Nonspecific reaction predominates. This may take the form of alopecia, icterus or edematous swellings in the skin. Urticarial and purpuric pheneomena are not uncommon. Morbilliform and scarlitiniform exanthems are seen. The exfoliative erythroderma complex with infiltration that is of a specific nature is also seen. Like others of the lymphoblastoma group the condition may be expressed in the form of nodules and plaques which ultimately ulcerate. Generalized or localized lymphadenitis is present in classical cases. The cutaneous lesions often are an early sign of the disease. The lesions frequently fade and then reappear. Dermatologic lesions that do not respond to ordinary forms of therapy after a reasonable period of treatment may be the first indication that one is dealing with lymphoblastoma.

LYMPHOSARCOMA

This is usually manifested only on the skin in the form of metastases from some other organ of the body. Bluish-red nodules and tumors which are often single are rarely seen as a skin development of this disease. Metastasis to the skin occurs only in about 5 per cent of cases of lymphosarcoma.

MYCOSIS FUNGOIDES

To the dermatologists, this is the best known of the lymphoblastomas as the skin manifestations are the chief and often the only sign of this affection. Three stages of the disease are known to occur: (1) premycotic, (2) infiltrative and (3) tumor. Pruritus, as in other forms of lymphoblastoma, may be the only evidence of this disease in its first several years. A definite diagnosis may not be possible until further lesions develop. However, it arouses a high index of suspicion. Generalized pruritus, erythrodermia or exfoliative dermatitis, especially in older individuals, should always arouse one's clinical curiosity as to the possibility of an early lymphoblastoma. Early cutaneous eruptions may simulate eczema, psoriasis or seborrheic dermatitis. These eruptions appear benign and are multiform in the characteristics which they assume. In the infiltrative stage, solitary or coalescent plaques and infiltrations of varied shape, size and color appear. They may have an overlying scale simulating the imbricated psoriatic scale and they may ulcerate. Intense pruritus is a usual accompaniment. These lesions temporarily involute or progress to tumors of deep bluish-red color that later ulcerate. Mucous membrane lesions commonly occur. In some cases the tumor stage may supercede without the preliminary stages of the disease. These tumors are notably sensitive to x-ray therapy. The condition frequently can be held in abeyance by this means with consequent prolongation of life for many months or years.

SUMMARY

1. Cutaneous manifestations often are the early and only sign of lymphoblastoma and may precede the other systemic signs by many months.

2. Presistent effort and repeated laboratory examinations are essenital over a period of months ultimately to establish a specific diagnosis in many instances.

3. Any generalized erythroderma or pruritus, especially in an elderly individaul, should be considered as of lymphoblastomatous origin until proven otherwise.

4. A single area of infiltration represented by a papule, nodule, plaque or tumor occurring at various varying anatomic locations on the body may be the only clinical evidence to suggest the diagnosis of lymphoblastoma.

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WHAT PRICE STRESS?

Even on a quiet day, between routine work and driving a car, everyone makes as many contacts with other people as our grandparents made in a month. The drag on the nervous system, the daily striving for equanimity demands a manifold myriad of conscious and reflex actions. Walking a block on a busy street requires as many directional decisions as would carry one a fortnight a generation ago. This applies to everybody, every worker. And the correlated mishaps, and crack-ups, accidents, and mental and physical blow-ups are in geometric multiplicity as compared to the era nostalgically called the gay 90's. All this is the workday frame of reference in which each must carry on his work.—David I. Sugar, M. D., in Detroit Medical News.

NEOPLASTIC DISEASES AND ARTERIOSCLEROSIS

In medicine today two problems overshadow all others in practical importance. They are neoplastic diseases and arteriosclerosis. In neither case are there clear indications as to how the practical problems of prevention or cure can be solved. It is, of course, possible that some of the existing knowledge about these diseases may be built upon to find preventives or cures. It is equally possible that entirely new information will have to be discovered before such developments will be possible.

It may be that some student of plant or lower animal forms will hit upon the key piece of information. If history is a guide it is as likely that the solution to these major problems will come through some studies apparently unrelated to the diseases in question as by direct attack.—Maurice B. Visscher, M. D., in The Journal Lancet.

ESTROGENS AND CANCER OF THE PROSTATE

As data accumulate there appears to be no doubt that treatment of advanced carcinoma of the prostate with estrogen is an important advance. It does not cure but it does produce striking temporary improvement.—J. F., in Ohio St. Med. J.

SEARCHING FOR THE TRUTH ABOUT THINGS*

By MRS. JOHN F. McCUSKEY,
Clarksburg, W. Va.

I would like to talk with you about something which I am willing to grant no human being can actually achieve to any degree of perfection, regardless of the effort, but which every person who is important in any way in our efforts as Auxiliary members, and which every human being for whom I have any respect has at least believed in up and down for recorded centuries, and does believe in, and which in the last ten years, has been the only conceivable reason why we, as Auxiliary members have come this far in American Medicine's campaign against socilization. I refer to that strong and passionate human belief that it is necessary, and good, to look for the truth about things.

We are not specialists in this vigilant fight for the freedom of our husband's profession. Nor is there any specialized group which looks for the truth about things. It should be a human characteristic. And even though this subject sounds so plain, so meaningless, upon sight and in sound—in words its connotations are voluminous—perhaps the apathy in regard to its meaning is the very reason why our strategy is not adequate today in boldness, dramatic impact, agility and historical soundness.

You and I are forever too busy doing what all the animals have to do. If your life is like mine you find yourself busy with the usual household chores. Try as we might, these things do seem to eat up many of our days. And these seemingly important tasks have kept us so busy that we have become strangers to what is happening in Washington. Where are the women who could be speaking out fearlessly and courageously for what they know to be right? We female human being are so easily deflected from an endeavor with any degree of severity or any endeavor the least bit demanding in its requirements, such as to search and inquire into the truth about the things.

We are 60,000 women sent out ahead by the men of the American Medical Association who registered belief in our assignment and activity. We should share in all the long lists of achievements made by this great association of medical men when they began defending their profession and attempted to stay out of the foils of government control. How could we pick up the campaign tools such as posters, mats, reprints,

*Inaugural address of the President of the Woman's Auxiliary to the West Virginia State Medical Association at the 27th annual meeting at White Sulphur Springs, July 21, 1951.

campaign tools such as posters, mats, reprints, basic speeches, resolutions, stories and special materials, with any degree of success or attainment to stop the compulsory health insurance legislation of 1949, when most of our members did not know the meaning of the bill itself?

It is sheer mockery to think that you or I could possibly establish firm belief in the minds of the people that the American medical system is the finest in the world's history and that it meets the needs of our people by voluntary means, if we do not know the history of the American Medical Association, the twelve-point program for advancement of medicine and public health. This is our only answer to those who attack our so-called weaknesses.

Because of our apathy, I am afraid that we have made ourselves sound pretty silly just by not looking for the real facts. Many doctors and their wives do not yet know the vital truths which have come from our National Educational Campaign, that this country must sell principles as well as products, ideals as well as service if we are to survive as a free people. I am afraid we have not presented our case too well because most of our American people still are dubious about the truth of our fighting socialism for humanity's sake and for freedom of our future generations. The truth is that many think it a selfish fight for monetary gains to our profession.

It just isn't enough for your husband to be a good doctor in order for him to remain a free doctor. It alarms me to find so much disinterest and unawareness on the part of so many doctors' wives, and I have concluded that in many cases it is because the husband himself has an apathy toward his own crucifixion.

It is true that too many wives of doctors have been taking a free ride while others carry their load. Some have never been aroused by a cause, purpose or belief in the principles, ethics and history of the medical profession. The new and vital power which came into this work by the efforts of the Women's Auxiliary was not strengthened by those who did not search for the truths of the inadequacies of our own system for the people deserving the best medical care.

If you are helping to search for the truths of our cause you will see the shortcomings of the medical profession, the needs for health improvements. In league clinics, familiar sights to me are families to whom medical fees come as a tremendous burden. Changes are going to be made, and if we don't make them others not so well qualified as we will make them for us. What can we offer specifically in the way of a program for removing this burden of fees to the indigent? Certainly if we know the truth, it is not socialized medicine but some health insurance plan. Which plan? What are the fees and what is the coverage of this or that protective health plan? These facts you and I must know. When the wife of each doctor in West Virginia is informed and aroused to her husband's profession, then and only then is she playing her role in Auxiliary activity.

Some sort of understanding must be worked out among us of what the truth is about these roles we are to play. Of course, I am vitally concerned in the program that will be carried out this year throughout our state, how effective this program shall be, and the part that you and I will play in that program. We can't function if we don't know what our proper function is. When we go into any kind of combat we must be trained and informed. In the fields of legislation, public relations, nurse recruitment and Today's Health, we must explore the truths. All other matters are of subordinate concern. If I could imprint this picture firmly in the minds of each of you so that 902 members would work as hard as they can to forward those responsibilities, then I should say I am grateful to you for the opportunity to serve as your president.

Again, I should like to remind you of the need for your becoming a member of one large organization which covers the entire country. I speak of the Woman's Auxiliary to the American Medical Association. The truth is that one cannot obtain the full benefit of membership in such an organization without attending national meetings where every state is represented or without reading the Bulletin, which covers the work of the National Auxiliary.

Some of us sit and want results before knowledge which, as I said before, no human being can successfully achieve to any degree of effectiveness. Do we want power ahead of knowledge? It is a very common experience for some of us in these executive positions to find so many capable members overawed with the idea that someone else can do the job better and that there is so little she can contribute. She then goes blithely on her way, irresponsible to her share of the work.

Education of our youth is where the old-time circus pitchman with his cure-all snake medicine is working the most devastatingly of all. Let it be borne in mind that with few exceptions all the adolescent years of present-day students have been passed during the same regime. Reflect, then, what effect the apparently authoritative teachings of textbooks must have on so many predisposed youthful minds. They are given to understand that "Presidential Leader-

ship in Legislation" is a legitimate, constitutional function; that "the President is in fact more representative of the people as a whole than is Congress"; that he is vested with authority "to compose and execute policy." Freedom, liberty and private initiative are being poisoned and are sick unto death. What is being taught to our children in the schools? A letter from Thomas Shelly, teacher of economics and history, Yonkers High School, Yonkers, N. Y. reads as follows:

"I find that the socialistic-communistic idea of taking from each according to his ability and giving to each according to his need — examples: D. P. A., Rehabilitation Program, old age benefits, is now generally accepted by most of our pupils. In an effort to explain the fallacy of this theory, I try this approach with my pupils:

"When one of the brighter or harder working pupils makes a grade of 95 on a test I suggest that I take away 20 points and give them to a student who has made only 55 points on his test. Thus, each would contribute according to his ability and, since both would have a passing mark, each would receive according to his need. After I have juggled the grades of all the other pupils in this fashion, the result is usually a 'common ownership' grade of between 75 and 80, the minimum needed for passing or for survival. Then I speculate with the pupils as to the probable results if I actually used the socialistic theory for grading papers.

"First, the highly productive pupils, and they are always a minority in school as well as in life, would soon lose all incentive for producing. Why strive to make a high grade if part of it is taken from you by 'authority' and given to someone else?

"Second, the less productive pupils, a majority in school as elsewhere, would for a time be relieved of the necessity to study or to produce. This socialist-communist system would continue until the high producers had sunk or had been driven down to the level of the low producers. At that point, in order for anyone to survive, the 'authority' would have no alternative but to begin a system of compulsory labor and punishments against even the low producers. They, of course, would then complain bitterly, but without understanding.

"Finally, I return the discussion to the ideas of freedom and enterprise — the market economy — where each person has freedom of choice, and is responsible for his own decisions and welfare.

"Gratifyingly enough, most of my pupils then understand what I mean when I explain that socialism, even in a democracy, will eventually result in a living death for all except the 'authorities' and a few of their favorite lackeys."

No doubt you are a clubwoman in your community. Do you know the truth about the women's organiaztions to which you belong? Please remember that the freedom to think does not license you to the freedom of ignorance about things around you which definitely have a bearing upon those responsibilities we have as wives of the members of the medical profession. And freedom to think is meaningless where there is no thought.

Did you know that if you are a member of A. A. U. W., P. T. A., N. E. A., B. P. W., American Legion Auxiliary, Quota Club, American Nurses' Association, General Federation of Women's Clubs, League of Women Voters, United Council of Church Women, then you are a member of the Women's Joint Congressional Committee? This organization meets in Washington and is orientated by politicians, lobbyists and federal government representatives. All national organizations here pool their efforts and acts and recommend decisions concerning federal legislation. Federal Aid to Education, Federal Aid to Maternal and Child Welfare and Children's Bureau in the Federal Security Agency are a few of the active Bills on which this committee has pooled their votes and influenced legislators.

Remember, these national presidents represent you and ten million other women of the nation and this is a pressure group being pressurized by the federal government. It happens that only the administration's official view of legislation is sent to all members of your local groups. The women's organizations all support the National Education Association point of view and the opposition is never considered. This is the motive, certainly, for our asking that doctors' wives join organizations if for no reason than quietly watching such unfair interpretations of legislation such as these.

Our National Association asked that all doctors' wives join the A. A. U. W., but that is not the solution to our true need for you in this organization or any other unless you enter these organizations knowing the truths for which you are there. Unless you are informed on all these national legislative measures you are actually doing the medical profession harm in your attempt to join just because you are opposed to your husband being under the yoke of the federal government.

Let us look into the truth about our only authentic health magazine, "Today's Health." At the A. M. A. meeting in June, the very appalling figure of a $14,000 loss was reported by Mr. Cargill, circulation manager of this magazine, a publication which you and I pledged ourselves to circulate for a project called Health Education. This is our greatest defense against socialized medicine and it is disappointing to find that there still is not only an apathetic attitude toward our responsibility to the medical association but a misunderstanding of our responsibility in relation to this magazine.

Here are the truths about this project. Some doctors' wives at the roundtable discussions on "Today's Health" reported that their husbands didn't want them to become magazine saleswomen; that they had been requested to sell it one hundred per cent to their fellow members

and the doctors; and that the magazine could not succeed on its own merits and consequently the Auxiliary had been asked to promote it. Some reported that the doctors in their community were not at all familiar with the magazine or the aims or purposes of the publication.

In answer to those of you who make an excuse for not assuming your share of Today's Health assignment by saying that your husband does not want you to be a magazine saleslady, couldn't you just remind your husband that it was given to you by the A. M. A. and that the magazine contains the only authentic material published for the lay people in his field of work? First of all, perhaps that husband should get acquainted with the work of his own association. The material is for all age levels, and all of our members, every doctor's wife, should sell it as widely as possible to lay people, young mothers, schools, libraries, beauty parlors, or for gifts; but the only reason for selling it to doctors is that the patient may have access to it in the waiting room.

It is a good magazine, the entire responsibility for its sale is ours, and it can easily make its way on its own merits if you will help. It is a source of income for the treasury in your local unit and contributes toward good public relations in your community. We should be proud that the exclusive right to promote such a fine magazine has been given the Auxiliary.

In our search for truth, we must all face the fact that events have made military men and politically-minded men out of our husbands who were unfamiliar and untrained in those fields of thinking, and when medical men must sacrifice their time and the ethics of medical procedure to fight politically corrupt machines interfering with their decisions and judgment, even their actual professional procedure, isn't in time for their entire families and friends to be concerned?

Just a few nights ago President Truman mentioned his desire to have socialized medicine. The conflict in Korea was mentioned secondly? If we keep alert perhaps in the search for future truths we shall find that the ultimate decision in this conflict between communism and freedom can be partially credited to the efforts of the 60,000 physicians' wives in our nation. That is, if these 60,000 wives combine their efforts in being thinking individuals and concern themselves a bit more with the rebirth of patriotism and the preservation of the principles upon which this nation was founded instead of sitting in apathy and enjoying American blessings which can easily pass away.

The American Medical Association recently admitted that a new and vital force and power had come into its fight against socialism. No battle was ever won without the concern and combined efforts of each and every soldier. So it is with us. If each one of us can point to some definite part taken in the battle, then we have fulfilled our obligations to the medical profession, but if some have allowed others to carry their share of the burden, then the fight may go on and on.

I have heard many say, "O, what can I do about such a big problem as this?" The members of the medical profession had no recourse but to resort to the corralling of the Auxiliary powers, no choice other than to sacrifice their pledge to humanity and become politicians and public relations chairmen, and it is up to us to relieve our husbands of some of these added duties.

Too many of us are still thinking and living in the time when our husband's profession was a free one, dedicated only to the care of the sick. Now, we are a definite part of the United Nations. As a world power, we represent the power of freedom, a single dedication to the higher principles of humanity. We need to do something about the understanding of our purpose as an organization and to learn facts of the true problems. The problem of greed which so often is called profit, the problem of license disguising itself as liberty, the problem of materialism bailed with security. Let us all search for some of the truths in our American history. Read the Gettysburg Address and some of the beautiful treatises on Americanism.

Some of our women made a great and effective effort in finding out the truth about issues and policies of candidates in our elections, urging organized groups in their communities to go to the polls, even in an off-year election; however, some of you keep fooling yourselves (not others) that socialization of the medical profession is only an opposing ideology, just so that you may sit idly by without making an effort to join the forces; the proponents of socialized medicine are waiting and hoping for more just like you. This is no time for arrogance or evasion. We should all buckle down and search for the truth about things and then do a little sound thinking about what is happening to our freedoms. "It is of importance whether a Coolidge or a Roosevelt occupies the White House . . . One man may be obsessed with an obstinate faith in an outmoded economic or social ideology while another is a crusader for the good life by increasing the social services of the government."

As the 1952 presidential election approaches, remember that every qualified citizen has the

prerogative of voicing his opinion in his government and choosing his law makers and administrators. Do not let it be said in November, 1952, the the civic character of the medical profession has grown flabby. Let's help find candidates who sincerely believe in stamping out socialistic trends in government and then support them actively.

We find ourselves in the center of world events as citizens and doctors' wives and to all of us should come the sobering realization that it is up to us whichever way the world and its freedoms and hopes go more than any other citizenry in the world or any other generation before us. Our bayonets this year must be fixed and aimed at a program of organization, especially in the hot spots for socialism and the medical health plans of organized labor.

The outcome of this fight rests on the strides we make in circulating "Today's Health" and on our work in health education. The bayonets from our exhibition booths and those of our public relations chairmen must be definitely aimed at resisting the first open and overt threat, and perhaps we can successfully stop a whole planned series of attempts to socialize many professions.

We must bend every effort to keep American medicine free and untrammeled, and as a body of intelligent women reaching into every organization in our respective communities, molders of opinions, we have an extremely important role to play, a searching of our own hearts and minds to discover, if possible, what our relation to the current problem is today.

Is American Medicine worth saving? Well, if it is to be saved, it must be saved by the intelligence, the loyalty and the activity of women such as you. If it is lost, it will be lost through apathy, inertia, the lack of cooperation of persons like you; so let us press on together in the great enterprise which the world knows as the American Medical Association, long since dedicated to freedom and search for truth! Today it carries on its great traditions!

Cross currents among us at times may seem to tumble our bark about, but we sail in open waters, our keel strong and ample, knowing our destiny and having our compass handed to us by that splendid body of men, the American Medical Association. If we keep our prow ever toward that desirable harbor which they conceive, no wind of opinion can long carry us off the course, for it is the set of the sail and not the gale that determines finally the direction in which we move. My one request to you is that we set sail in just one boat this year.

"Isn't it strange that princes and kings,
And clowns that caper in sawdust rings,
And common folks like you and me,
Are building for eternity?
To each is given a bag of tools,
A shapeless mass and a book of rules,
And it's up to you and it's up to me
What our search for truth will build for eternity."

DOCTORS AND CORONARY DISEASE

Coronary disease appears to result from a pathological adaptation to stress. Although the problem can be stated in terms of Heberden's "disturbance of mind" and of ischaemic heart muscle, its solution, like that of other stress diseases, can also be sought in a more philosophical concept, perhaps such as that of Demant, who described a sickness of the community "in which the multifarious contacts of recent times grow to a point at which the human being cannot adapt himself without spiritual and mental and often bodily sickness." In elaborating this idea Stewart attempted to show that the ambitious person who strives to achieve independence is at the present time subject to a new form of stress for which recent social changes are responsible.

The social historian of the future will perhaps write about the present rise and recognition of the stress diseases. In at least one of them he may well wonder why doctors, whose profession was to teach patients how to adapt to their circumstances of life, were themselves most commonly the victims.—British Medical Journal.

THE NERVOUS CHILD

In treating nervous children the doctor needs time to gain his facts. It will repay him to study feelings and family attitudes rather than actions, and he may well find that the patient's or the parents' own words will tell him more than his own questions. His conclusions will be strengthened by his intimate knowledge of the background in which his child patient lives.

He should be careful to avoid creating physical anxiety because there seems no obvious explanation for a mental symptom, and he should seek to judge fairly between mental and physical suffering without letting the patient play one off against the other.

He may need to remind himself that if the child could "pull himself together" he probably would. A child does not enjoy the scenes he creates; indeed, he is often panic-stricken by them.

If the doctor decides to reassure a mother, it will be because he can feel sure that a symptom is not dangerous. He would be unwise to dub it unreal or imaginary on that account. He may do a lot, in a stable family, to restore mutual confidence. He can comfort the inexperienced mother with the knowledge that it takes most of the threescore years and ten to learn how to live, and that one function of family life is to provide a warm shelter where a child can safely display his deepest fears, knowing that they will be understood and cared for.—E. M. Creak, M. D., in British Medical Journal.

The President's Page

Dear Sobisca:

As you are taking over the job of President of this Association January 1, I thought I might let you know what to expect, based upon my experience during the present year.

In the first place, your practice will become a secondary factor. You won't be able to make appointments in advance because you will never know when you are going to take off over the state. Your time gone will amount to about three months in trips of one day to one week. You will eat filets, have your picture taken and make the same speeches more times than you thought possible.

You will have new problems coming up every day and when they get too touchy, you will duck out from under by turning them over to the Council.

You will be amazed at the volume of work the various committees are doing. It is a shame that the members of the Association do not realize this. The work of the "Old Guard" on these committees is particularly outstanding, and when the going gets tough you'll call on them and they'll come through.

You will have the complete cooperation of the membership in your program. They realize that our future depends upon the activities of our Association.

You will realize that the best thing that ever happened to the Association was when Charles Lively became executive secretary. You'll spend a lot of time trying to think of something nice to do for him to show your appreciation for the grand job he will do for you and the Association.

This President's Page will make the time fly. You will no sooner get one written until it will be time for another.

You're going to have a great year because we 1428 other members are solidly behind you.

It's a tough job, but you'll enjoy every minute of it.

Frank G. Salvaggio

President.

S. S. Hall, M. D.,
Clarksburg, W. Va.

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BUREAUCRACY AD INFINITUM

As Will Rogers used to say, "all we know is what we read in the papers." And we do see a lot in the papers now-a-days, especially about what goes on in Washington. For instance, we read a few days ago that the Federal Security Agency, which we presume to be the governmental agency presided over by Mr. Oscar Ewing, has earmarked $19,000 to be spent in studying the "tolerance for environmental stress in aged and newborn sheep and goats." And we read further that $7,500 has been allotted for a study of the psychology of the Hutterites.

We recently heard a man say that Mr. Ewing is a great humanitarian and we'll admit that any man must be big hearted and deeply interested in dumb brutes to spend $19,000 of the taxpayers' money in studying environmental stress reactions in the sportive lamb and the senile nanny. As for the Hutterites, we are not well enough informed to speak intelligently concerning their mental health, but we would consider that such a proposed expenditure could more accurately be classified as humanitarian than the item to be squandered on sheep and goats.

We never did derive any pleasure from paying taxes even though in our saner moments we admit taxes are necessary—we were about to say a necessary evil. We wonder why an item was not set up in the budget for the study of environmental stress reactions in the taxpayer at taxpaying time. But it is possible, nay even probable, that Mr. Ewing classifies taxpayers as goats, which metaphorically speaking they certainly are. At any rate we are developing the phobia that we shall have visual hallucinations of bloody sheep and goats cavorting all around us the next time we pay tribute to Caesar.

REPUTATION TOO GOOD

A lot of the doctor's troubles, it seems to us, stem from a paradox: For a lot of real and practical purposes his reputation is too good.

A lawyer may lose a case, and no one thinks anything of it. Indeed, it is understood that some lawyer will lose every case. A minister may lose a soul, but he usually gets credit for his good intentions. And a teacher may fail utterly to implant the fundamentals of learning with some dunderhead, but we readily concede that he did not have much to work with. Only with a doctor it is different.

We expect him to perform miracles of medicine with the efficiency of a machine and without regard for the economic limitations which the rest of us find so binding upon our good intentions. And when, for any reason, he does not, may heaven have mercy upon him. No one else seems much inclined.

The odd thing about this is that of all the professions medicine has made the most remarkable progress. Thanks alike to scientific discovery and the selfless devotion of the medical practitioner more people live longer in better health than ever before. The statistics prove it conclusively. In fact doctors have succeeded so well in reducing infant mortality and prolonging the life span that to many students of the world's problems over-population is, or ought to be, our chief concern.

Strangely, when something goes wrong or seems to, little of this is credited to the doctors' account. In part because of their collective record, we allow them no margin of error and impose a standard of perfection which we dare not apply to ourselves. It is at once a warm and honest compliment and a terrifying burden which we, as well as the doctors, might weigh again. —Charleston Daily Mail.

COMPARATIVE EXPENDITURES

Our old friend, Dr. W. H. Anderson, of Booneville, Miss., has done the medical profession and the people of the United States a distinct service.

In his chairman's address before the section on general practice at the recent meeting of the Southern Medical Association in Dallas he presented a comparative study of our national expenditures for 1950.

According to Doctor Anderson, the American people last year spent for gambling 20 billion dollars; for automobiles, 19 billion; for alcoholic liquors, 17 billion; for tobacco, 12 billion; and for cosmetics, 8 billion. With the possible exception of automobiles, these items cannot possibly be classed as necessities.

For the following items, which are classified by Doctor Anderson as "essential," his figures are: Education, 5 billion; physicians, 1.7 billion; hospitals, 1.3 billion; drugs and drug sundries, 1.1 billion; all churches, 1 billion; and for dental care, 900 million.

Medical care figures up four per cent of the family budget, or only five-eighths as much as we spend for cosmetics, one-fourth as much as we waste in gambling, considerably less than one-third as much as we spend for liquors, and less than half as much as for tobacco.

We wonder how long it will be before some Washington bureaucrat wants to levy a payroll tax to cover our expenditures for whiskey and tobacco.

Thanks, Bill, you did an excellent job, and our thanks to the daily press of the nation for giving your paper such splendid coverage.

WHY SMALL TOWN DOCTORS?

If more medical graduates knew why small town practices were chosen by those who have done so, perhaps more would go from medical school to settle in small towns. And thus the shortage of doctors in many small towns and rural communities would be eased. Or at least that is the way the Missouri Farmers' Association seems to have figured.

To find out what attracts young doctors to small town practices, the association mailed a questionnaire to all graduates of medical schools in the last 10 years who are practicing in Missouri towns of less than 10,000 population.

There were 149 of them. Sixty-eight answered. Most of them had located in small towns because they simply liked small towns, or because they had family ties nearby, or because they were reared in a small town, or because of a combination of these reasons. Forty-seven said so.

Twenty-two said their decisions were influenced by the local need for doctors. Some wanted the experience of general practice before specialization and thought a small town was the best place to get it. Several said they wanted to get away from city specialization and monopoly.

All this is a very healthy symptom in the medical profession. The Hippocratic Oath, so far as we can make out, has precious little to say to the physician about making his knowledge socially useful. There would be a decided improvement in that part of the revised version, proposed by the World Medical Association, which says: "I solemnly pledge myself to consecrate my life to the service of humanity."

Those who solemnly make that pledge would find it their first step, we should think, to set to work wherever humanity presents the most pressing need for their services. It seems to us to have been put into practice in their own lives, though perhaps unspoken or even unphrased, by young doctors who have chosen to work in communities which but for them would have inadequate medical service or none at all. —St. Louis Post Dispatch.

HONORS WELL DESERVED

A most pleasing situation has developed as the result of the annual meeting of the Southern Medical Association at Dallas, Texas, early in November. A West Virginia doctor, Robert J. Wilkinson, of Huntington, and the wife of a West Virginia doctor, Mrs. V. Eugene Holcome, of Charleston, have been chosen, respectively, as president of the Association and as president of the Auxiliary. West Virginia has never before been so honored in any one year, and it is not likely that a similar situation will be experienced at any time in the near future.

We are proud of the two able representatives of these important groups which number so many West Virginians as members. They are both capable, well qualified and deserving, and will, in our opinion, provide the leadership that is necessary in organizations of this character.

We not only congratulate Doctor Wilkinson and Mrs. Holcombe, but all of the members of the Southern Medical Association and Auxiliary and the medical profession and members of the auxiliary generally in all of the states comprising the Southern Medical Association.

Both Doctor Wilkinson and Mrs. Holcombe have our every good wish for success in the important work that lies ahead for them in 1952.

MERRY CHRISTMAS TO ALL

As we approach the holiday season, we note that 24 members of the West Virginia State Medical Association are in active service with

our armed forces. More are being called in December, and still more will report for duty early in 1952.

Christmas is the one day in the year when everybody wants to be at home. With possibly three or four exceptions, West Virginia doctors serving overseas and at camps in this country will have to spend the holidays away from home. However, whether at home, at some camp in this country, or overseas, we wish each and every one in the service a Merry Christmas and Happy New Year.

This same wish goes to all the other members of the West Virginia State Medical Association. Christmas should be a happy occasion for all if an armistice is reached in the fighting in Korea, and if the situation in Europe becomes brighter.

We fervently hope that by next Christmas peace will have come to the world and that all of our doctors who have so willingly offered their services to their country will have returned to their homes and to the private practice of their profession.

ATTITUDES TOWARD COMPENSATION LAWS

Most administrators, physicians and lawyers have not been sufficiently trained in the basic fundamentals of the social sciences to adequately understand and anticipate—let alone alter—social forces of the magnitude, and with the momentum, of those set in motion by workmen's compensation laws.

The present generation has two courses open. The first is for each to confine his efforts to his purely professional role, permitting the ultimate pattern of compensation to take shape as it will. The second course is for us, to the extent of our ability, to orient ourselves in the basic principles of economy, clinical psychology, sociology and cultural anthropology, and be better—if not thoroughly—prepared to influence the trends in compensation insurance. We will have valuable assistance in this if we step out of our ivory towers of practical experience, knock on the doors of the halls of learning and invite the interest of those who have the academic knowledge of these disciplines, but who now, too frequently, are isolated behind the ivy-covered walls.

And to the practitioners of professions in the next generation we should offer a better choice than either to ignore the social implications of their life work or to awkwardly grasp for belated help. We ought to insist that our educational institutions make basic courses in the social sciences mandatory for students of business administration and for the premedical and prelegal students. If this is done, the next generation may—with greater facility—improve and perpetuate present means of financial aid, medical care and rehabilitation for the injured workman.—Christopher Leggo, M. D., in California Medicine.

GENERAL NEWS

DR. R. J. WILKINSON, OF HUNTINGTON, NEW SOUTHERN MEDICAL PRESIDENT

Dr. Robert J. Wilkinson, of Huntington, was installed as president of the Southern Medical Association at the 45th annual meeting in Dallas, Texas, November 8, the closing day of the session. Because of personal illness, he was unable to make the trip to Texas, and was installed in absentia. He succeeds Dr. Curtice Rosser, of Dallas, and will hold office until the next annual meeting which will be held in 1952 in Miami, Florida.

Dr. Walter C. Jones, of Miami, Florida, was named president elect. Dr. Alphonse McMahon, of St. Louis, Missouri, was elected first vice president, and Dr. Frank A. Selecman, of Dallas, second vice president. Dr. R. L. Sanders, of Memphis, Tennessee, is the new chairman of the council and is also chairman of the executive committee. Besides Doctor Sanders, the committee is composed of Dr. Fred E. Woodson, of Tulsa, Oklahoma, and Dr. Olin S. Cofer, of Atlanta, Georgia.

Doctor Wilkinson's written response was read by Dr. William E. Bray, of Huntington. Doctor Bray also attended the sessions of the Council in the place of Dr. Andrew E. Amick, of Lewisburg, who was unable to be present.

Doctor Wilkinson said that he is "not unmindful of the responsibility that goes with this great honor, a

R. J. Wilkinson, M. D.

responsibility to the Southern Medical Association and to the medical profession, especially in the states that comprise the Association. I shall assume this responsibility unafraid to meet the problems that arise."

He said that he anticipated the full cooperation of a most representative, friendly Council, Mr. C. P. Loranz, the secretary-manager, Dr. and Mrs. M. Y. Dabney, of the Southern Medical Journal, the president elect, and the two vice presidents. "With this group of officers who will conduct the affairs of the Southern Medical Association next year," he said, "you can be assured that your every interest will be safeguarded."

Third Stote Doctor to Serve

Doctor Wilkinson is the third West Virginia doctor to serve as president of the Association. Dr. Thomas Moore, of that city, was president in 1929, and Dr. Walter E. Vest, of Huntington, served in 1939.

Dr. N. H. Dyer, of Charleston, state director of health, vice chairman of the section on public health, presided at the session which was held on November 7. He introduced Dr. John M. McDonald, of Jacksonville, Florida, who presented a paper on the subject of "A Florida Pollen Study." Dr. J. J. Brandabur, of Huntington, who has just retired after serving for several years as secretary of the section on industrial medicine and surgery, served as secretary of the session which was held on Tuesday, November 6.

Dr. Joseph L. Knapp, of Dallas, formerly superintendent of Weston State Hospital, was one of the three speakers presenting a paper before the section on neurology and psychiatry. His subject was "The Responsibilities and Facilities Available in a Private Neuropsychiatic Hospital to the Medical Profession."

Doctor Swart Speaks Before Section

Dr. Howard A. Swart, of Charleston, chairman of the section on orthopedic and traumatic surgery, presided at all of the sessions of his section. His annual address as chairman was presented Thursday morning, November 8, his subject being "The Use of Cutis (Skin) as Repair Material in Orthopedic Operations."

Doctor Swart said that strips of cutis are generally used in orthopedic surgery. "Cutis is superior to fascia," he said, "in that it is more active and has a longer life. It is more readily available and will not tear in its transverse axis, as will fascia. It heals in place in a comparatively short time."

He said that in orthopedic surgery the epidermis is removed by scraping the surface with a scalpel until such surface "oozes blood all over." He said that a piece 35 per cent wider and slightly longer than is necessary should be removed, as the cutis will shrink after removal. The most accessible donor site, he said, is the side of the thigh, although the abdomen may be used.

Doctor Swart stated that he had performed six operations, using cutis, since 1946. He further stated that no bad results have followed from its use, and no epidermal cysts or tumors have been found in the transplanted cutis. The speaker said that muscle hernias which follow the removal of larger pieces of fascia from the thigh are avoided when cutis is used.

Large Doctor Registration

The following West Virginia doctors were registered at the Baker Hotel, in Dallas, through Wednesday, November 7:

N. H. Dyer, W. E. Hoffman, V. E. Holcombe, Archibald P. Hudgins, and Howard A. Swart, Charleston;

John C. Kerr, Leonard E. Neal, Cecil O. Post, Charles N. Slater, and Eugene B. Wright, Clarksburg;

Edward W. Hickson, Seigle W. Parks, and J. R. Tuckwiller, Fairmont;

John J. Brandabur, William E. Bray, Jr., T. W. Moore, William A. Niermann, Thomas J. Sasser, and Marshall J. Thomas, Huntington;

H. H. Howell, Madison; Roser S. Clapham and R. B. Talbott, Martinsburg; Charles S. Mahan, Morgantown; Leonard I. Hoke, Nitro; E. D. Tucker, Nutter Fort; and Howard G. Weiler, Wheeling.

More than 2,000 doctors were registered, and the overall registration totaled 3,100.

PROPOSED AMENDMENTS TO BY-LAWS

The following proposed amendments to the By-Laws, prepared and approved by the Committee on Revision of Constitution and By-Laws, headed by Dr. Sobisca S. Hall, of Clarksburg, were presented to and approved by the Council at the regular fall meeting held at Parkersburg October 28, 1951:

"Chap. VIII, Sec. 1. Amend the section by changing the name of the "Committee on Revision of the Constitution and By-Laws" to "Committee on Constitution and By-Laws."

"Chap. VIII, Sec. 2. Amend the first paragraph to read as follows: "With the following exception, the members of all committees appointed by the President shall serve during the calendar year next succeeding their appointment:".

(This paragraph now reads as follows: "With the following *exceptions*, the members of all committees appointed by the President shall serve during the calendar year next succeeding their *appointments*:". The exception concerns the Program Committee, the members of which are appointed by the president elect and serve from the time of their appointment until the next annual meeting).

"Chap. VIII, Sec. 2. Delete the entire fourth paragraph pertaining to the method of selecting members of the committees on Child Welfare and Maternal Welfare.

(The effect of this amendment would be to give the President power to name the members of the committee on Child Welfare and Maternal Welfare.)

(Old paragraph three relating to the composition of the Syphilis Committee was deleted in amendments adopted by the House of Delegates in 1951, and the President is now empowered to use his own judgment in the appointment of all members of the committee.)

The proposed amendments will be offered by the committee in the House of Delegates at the annual meeting at White Sulphur Springs July 24-26, 1952.

MRS. V. E. HOLCOMBE PRESIDENT OF SOUTHERN MEDICAL AUXILIARY

Mrs. V. Eugene Holcombe, of Charleston, is the new president of the Woman's Auxiliary to the Southern Medical Association. She succeeds Mrs. L. S. Thompson, of Dallas, Texas, and was installed during the annual meeting in that city, November 7, by Mrs. E. H. Cary, the first president of the auxiliary, who was elected at the organization meeting in 1924.

Mrs. C. N. Slater, of Clarksburg, a member of the Woman's Auxiliary to the Harrison County Medical Society, was elected corresponding secretary, and will serve until the annual meeting in Miami, in November, 1952. Mrs. Richard Stover, of Miami, was named president elect; Mrs. Stanley Hill, Corinth, Mississippi, first vice president; and Mrs. Shelby Carr, Richmond, Kentucky, second vice president. Mrs. Ridings Lee, also of Dallas, will serve as third vice president.

Other officers were elected at the Dallas meeting as follows: Recording secretary, Mrs. Harry Gilkey, Kansas City, Missouri; treasurer, Mrs. Louis K. Hundley, Pine Bluff, Arkansas; historian, Mrs. Harvey Garrison, Jackson, Mississippi; and parliamentarian, Mrs. James Brawner, Atlanta, Georgia.

Mrs. V. Eugene Holcombe

Mrs. Holcombe is the second member of the West Virginia auxiliary to serve as president of the Southern Medical Association. Mrs. John P. Helmick, of Fairmont, served in this capacity during 1944 and 1945. Mrs. Holcombe is also a past president of the Woman's Auxiliary to the American Medical Association.

Mrs. Holcombe will serve as president of the auxiliary during the period when Dr. R. J. Wilkinson, of Huntington, will be president of the Association. She has stated that the auxiliary is not a policy-making organization, but will cooperate to the fullest in the activities of the Southern Medical Association.

One activity of the auxiliary, she said, will be an expanded educational program to emphasize the role of the medical profession and its service to humanity. This work will be a part of the medical association's campaign against compulsory health insurance.

Mrs. Holcombe and the retiring president, Mrs. Thompson, were honor guests at the annual luncheon of the auxiliary, held at the Baker Hotel, in Dallas, November 7. The luncheon was attended by 778 doctors' wives, the largest group ever to attend a Southern Medical Auxiliary gathering, and it was stated by the chairman that 19 of the 23 living past presidents of the auxiliary were present. Mrs. Harold Wahlquist, president of the Woman's Auxiliary to the American Medical Association, was the guest speaker.

RELOCATIONS

Dr. David C. Harvey, of Delbarton, is now in Middletown, Connecticut, where he will remain until he leaves for active service with our Armed Forces. His address there is 20 Silber Street.

* * * *

Dr. Don V. Hatton, of Oak Hill, has moved to Williamson where he will continue in general practice.

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Dr. John S. Pearson, who has been engaged in practice at Huntington since 1948, has accepted the position of assistant medical director of the John Hancock Mutual Life Insurance Company, in Boston, and has assumed his new duties there. His address is 7 Ridgefield Road, Winchester, Massachusetts.

* * * *

Dr. A. Wilson Brown, of Narrows, Virginia, has accepted a three-year residency in radiology at a hospital in Shreveport, Louisiana. His address in that city is 3201 Wagner Street.

* * * *

Dr. William V. Crabtree, a native of Wellsburg, has located for the practice of medicine at Cass. He received his A. B. and B. S. degrees at West Virginia University and graduated from the Medical College of Virginia in 1950. He served his internship at Ohio Valley General Hospital, in Wheeling.

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Capt. Alfred Joseph (MC), USA, of Montcoal, who has been stationed at Fort Sam Houston, Texas, has been transferred to the U. S. Army Hospital, 3rd Army AAA TC, Camp Stewart, Georgia.

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Dr. Er Chang Ping, of Clarksburg, is in Reading, Massachusetts, where he will pursue special psychiatric studies for the next year.

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Dr. Thomas S. Knapp, who retired November 1 as superintendent of Spencer State Hospital, has located at Charleston where he will engage in the practice of his specialty of psychiatry, being associated with Dr. William B. Rossman, with offices at 207 Bradford Street in that city.

OFFICERS ELECT PRESENT AT FALL COUNCIL MEETING AT PARKERSBURG

The Council of the West Virginia State Medical Association, at the regular fall meeting held at Parkersburg Sunday, October 28, directed that the Doctor-Press-Radio Code of Ethics be printed in a form suitable for framing and distributed to all members of the State Medical Association, newspapers, trade and professional journals, and broadcasting stations in West Virginia.

The Code was prepared by a committee headed by Dr. E. L. Gage, of Bluefield, and has been approved by the Council, the Journalism Conference, composed of members of the newspaper profession in West Virginia, and by the West Virginia Broadcasters' Association. The Code will be printed and mailed out sometime in December.

Honorary Members

The following members of the Central West Virginia Medical Society were elected to honorary lifetime membership in the West Virginia State Medical Association:

Grover Cleveland Corder, Jane Lew
William Edward Echols, Richwood.

AMA Associate Fellowship

Dr. R. W. Love, of Moorefield, was nominated to associate fellowship in the American Medical Association, and the executive secretary was directed to submit the nomination to the AMA in Chicago, to be acted upon by the Board of Trustees before the annual meeting in Chicago in 1952.

Doctor Vest Reelected to Publication Committee

Dr. Walter E. Vest, of Huntington, who has served for several years as editor of the West Virginia Medical Journal was reelected a member of the Publication Committee for the five-year term ending December 31, 1956. The members of the Committee had unanimously recommended him for reelection to this office.

Doctor Hoffman Named to Sub-Committee

Dr. James S. Klumpp, of Huntington, tendered his resignation as a member of the sub-committee heretofore appointed to confer with members of the osteopathic society with reference to the creation of a composite licensing board. He assigned ill health as the reason for his resignation. He expects to spend the next several months in Florida.

The Council reluctantly accepted the resignation and directed the chairman to appoint some member of the Council as Doctor Klumpp's successor. Subsequently, the chairman, Dr. Charles E. Watkins, appointed Dr. Charles A. Hoffman, of Huntington, as Doctor Klumpp's successor, and he will serve with Dr. Walter E. Vest, of that city, and Dr. D. A. MacGregor, of Wheeling, as members of the subcommittee.

Recommend Chicago for AMA Clinical Sessions

Dr. Walter E. Vest, delegate to the American Medical Association, was directed to vote for a resolution which will be presented by the Ohio AMA delegation at the clinical session in Los Angeles in December, which, if adopted, would require all clinical meetings of the AMA after 1952 to be held in Chicago.

Doctor Vest was directed to name as the other AMA delegate from West Virginia some member of the Association who might be present at the clinical meeting in Los Angeles. This step was taken in view of the fact that it was reported at the meeting that neither Dr. George F. Evans, of Clarksburg, the other AMA delegate, nor Drs. James L. Wade, of Parkersburg, or Pat A. Tuckwiller, of Charleston, alternates, can be present at the meeting.

Upon the request of Dr. Donald G. Anderson, of Chicago, secretary of the American Medical Education Foundation, the Council authorized the chairman to appoint a state chairman for this group.

Committee on Diabetes Discharged

The committee on diabetes was officially discharged by the Council, the members of which expressed thanks for the very effective work that has been done since the special committee was created several months ago.

A suggestion for the discharge of the committee came from Dr. William M. Sheppe, of Wheeling, and Dr. George P. Heffner, of Charleston, who stated that if the committee were kept alive, there would be considerable overlapping of activities.

Doctor Sheppe is president of the Diabetes Association, and Doctor Heffner is chairman of the special committee.

Hancock County Health Officer

A resolution from the Hancock County Medical Society concerning the appointment of a county health officer for that county was presented to the Council, which went on record unanimously as upholding the action of the Society and Dr. N. H. Dyer, state director of health, in the matter of the continuance in office of Dr. L. O. Schwartz, of Weirton, as county health officer.

Liaison Committee to State Health Department

The chairman was directed to appoint a committee to meet with Dr. N. H. Dyer, state director of health, for the purpose of discussing fully the proposed changes in the regulations affecting medical laboratories and "for the further purpose of endeavoring to reach a complete and satisfactory understanding between the state department of health and the members of the committee representing the State Medical Association." Dr. Charles E. Watkins, the chairman, appointed as members of the special committee Dr. E. L. Gage, Bluefield, chairman; Dr. Thomas G. Reed, Charleston; and Dr. Clark K. Sleeth, Morgantown.

Proposed Amendments to By-Laws

The Council unanimously approved a report presented by the Committee on Revision of the Constitution and By-Laws submitted through the chairman, Dr. Sobisca S. Hall, of Clarksburg. One of the amendments proposed provides for the appointment by

the president of members of the standing committees on child welfare and maternal welfare. At the present time, the committees are elected by the House of Delegates, and the chairman of each committee appointed by the president. The proposed amendments are printed elsewhere in this issue of the Journal.

AMA Delegates to Attend Council Meetings

Accepting a suggestion made by Dr. Walter E. Vest, of Huntington, one of the AMA delegates from West Virginia, the Council ordered that AMA delegates and alternates from this state be invited to attend all future meetings of the Council and remain during the discussion of any matters that might pertain to their participation as members of the AMA House of Delegates.

The following members of the Council were present at the meeting: Dr. Charles E. Watkins, Oak Hill, chairman; Dr. Frank J. Holroyd, Princeton, president; Dr. A. R. Sidell, Williamstown, first vice president; Dr. J. C. Huffman, Buckhannon, second vice president; Dr. T. M. Barber, Charleston, treasurer; Drs. Thomas G. Reed of Charleston; J. P. McMullen, Wellsburg; L. Rush Lambert, Fairmont; Fred R. Whittlesey, Morgantown; Hu C. Myers, Philippi; James S. Klumpp, Huntington; Athey R. Lutz, Parkersburg; J. C. Lawson, Williamson; E. L. Gage, Bluefield; D. C. Ashton, Beckley; and Russel Kessel, Charleston; and Mr. Charles Lively, secretary ex officio.

The meeting was also attended by Dr. S. S. Hall, Clarksburg president elect; Dr. Clark K. Sleeth, Morgantown, first vice president elect; Dr. Maynard Pride, Morgantown, councillor elect from the second district; Dr. Charles A. Hoffman, Huntington, councillor elect from the fourth district; Dr. Raymond Updike, Montgomery, councillor elect from the sixth district; and Dr. Walter E. Vest, Huntington, delegates to the AMA House of Delegates.

AUXILIARY PRESIDENT ELECT IN ACCIDENT

Mrs. Seigle W. Parks, of Fairmont, president elect of the Woman's Auxiliary to the West Virginia State Medical Association, suffered painful injuries when the cab in which she and her husband were passengers between the airport in Dallas and a downtown hotel went out of control and crashed over an embankment. She suffered a broken nose and painful facial bruises. Doctor Parks and the driver of the cab were not injured.

Doctor and Mrs. Parks were in Dallas to attend the sessions of the Southern Medical Association and Auxiliary. Mrs. Parks was confined in a hospital in that city until the last day of the meeting. She recovered sufficiently to go on to Chicago to an Auxiliary board meeting a week later.

NEW ASSISTANT SUPERINTENDENT AT HOPEMONT

Dr. J. A. Haney, of Steubenville, Ohio, who has served as health commissioner for Jefferson County for the past four years, has accepted appointment as assistant superintendent at Hopemont Sanitorium and will assume his duties there December 1. He succeeds Dr. Edwin J. Kroeker, resigned.

STATE HYGIENIC LABORATORY OFFERS REFERENCE LABORATORY SERVICES

The Laboratory Section of the Communicable Disease Center, USPHS, Chamblee, Georgia, has informed directors of all state health department laboratories that hereafter the Communicable Disease Center laboratories will accept for examination only those specimens which are referred by laboratories of state health departments.

According to Dr. N. H. Dyer, state director of health, the purpose of the Communicable Disease Center laboratories is to provide facilities for special or unusual procedures which are beyond the scope of activity of the state health department laboratory, and for research leading to new or improved procedures. In the past, they have received directly from physicians and private laboratories all over the United States a growing number of requests for laboratory services which are readily available in the laboratories of the various state health departments. Thus, their time and facilities which are intended for diagnostic aid in the more exotic procedures have been considerably dissipated.

In West Virginia, physicians and private laboratories should send such specimens and requests to the Hygienic Laboratory Division of the West Virginia State Department of Health. If the examination requested is not available at that laboratory, the specimen will be immediately referred to the Communicable Disease Center or other reference laboratory known for its ability in the desired sphere.

The West Virginia Hygienic Laboratory maintains close relations with such reference laboratories, and frequently uses their services for confirmation of its own results. In like manner, other laboratories in West Virginia may at any time refer specimens to the State Hygienic Laboratory for confirmation.

In the case of laboratory examinations for malaria, the National Malaria Society this year requested that any laboratory examining suspected specimens for malarial parasites forward such specimens, properly identified and regardless of results, to its state health department laboratory for parallel examination. The state laboratory then reports its results to the sender, and forwards the specimen to the National Depository for Malaria Slides, in Georgia, where the specimens are again searched by experts on malaria.

A "thick blood film" as well as a "thin film" should always be prepared and forwarded from each suspected case, since, according to Doctor Dyer, the thick film often detects cases which may be missed entirely even with repeated examinations by the thin film technique. The National Malaria Society hopes that this will still further reduce the relatively small residual of malaria which is still endemic in the continental United States, and will prevent the possible spread of malaria which could readily occur as civilians and members of the armed forces return from Korea and other malarial areas.

No laboratory procedure can be dependable unless the specimen is correctly selected, transported under

suitable conditions, and accompanied by the necessary identifying data. In the more exotic diseases or unusual examinations, this is particularly important. Should the sender desire aid in determining the preferred type of specimen and its preparation, the State Hygienic Laboratory will gladly offer its assistance and in most cases will be able to furnish the information.

MLB LICENSES 31 DOCTORS

At the meeting of the Medical Licensing Board, held in Charleston, October 4, 1951, thirty-one doctors were licensed to practice medicine in West Virginia, 5 by direct examination, and 26 by reciprocity with other states.

The following doctors were licensed by examination:

Chambers, John Turner, Charleston
Cobliner, Harry, Charleston
Werthammer, Siegfried, Huntington
Lowy, Otto Joseph, Charleston
Newman, Benjamin, Charleston

The following is a list of doctors licensed by reciprocity:

Becker, Merrill Martin, Welch
Callender, George Russell, Charleston
Chambers, June Ritchie, Charleston
Chelton, Alice Graybill, Coal Fork
Chelton, Louis Guy, Jr., Coal Fork
Cloud, Luther Atwood, Montgomery
Cronlund, Raymond William, Philippi
Dickinson, Daniel Wayne, Wheeling
Eder, Gerald Jerome, Huntington
Gates, Wright Addison, Jr., Logan
Hecksher, Rudolph Herman, Jr., Parkersburg
Henderson, Andrew Hunter, Jr., Williamson
Joyner, Roy Elton, South Charleston
Konyha, Paul Peter, Martins Ferry, Ohio
Leckie, Jack, Huntington
Morrow, Clarence Stanley, Gary
Myers, Karl Johnson, Jr., Philippi
Nester, Murlin, Montcoal
Paine, Albert James, Charleston
Philpott, William Howard, Berkeley Springs
Reed, Benjamin Harrison, Jenkinjones
Reisner, Lewis Carl, Morgantown
Ryan, Ralph Wade, Morgantown
Smith, Louis Spencer, Charleston
Shiels, Thomas V., Beckley
Webster, Paul Fred, Jr., Morgantown

The winter meeting of the Medical Licensing Board will be held at the Capitol, in Charleston, January 7-9, 1952.

AUXILIARY CONFERENCE IN CHICAGO

The 8th annual conference of state presidents and presidents elect, sponsored by the Woman's Auxiliary to the American Medical Association, was held in Chicago, November 14-15. Besides officers of state auxiliaries, the meeting was attended by national committee chairmen and past national officers.

The following representatives were present from West Virginia: Mrs. John F. McCuskey, Clarksburg, president of the Woman's Auxiliary to the West Virginia State Medical Association, Mrs. Seigle W. Parks, Fairmont, president elect, and Mrs. V. Eugene Holcombe, Charleston, president of the Woman's Auxiliary to the Southern Medical Association and a past president of the American Medical Association.

WEST VIRGINIA DOCTORS AT ACS MEETING

Dr. Ralph S. McLaughlin, of Charleston, was a guest speaker on the program of the American College of Surgeons at the annual meeting held early in November in San Francisco. His subject was, "Chemical Burns of the Eye."

West Virginians attending the meeting included Dr. and Mrs. McLaughlin, Dr. R. C. Broaddus and Dr. Paul E. Vaughan, of Beckley; Dr. and Mrs. Russell S. Coffindaffer, of Shinnston; Dr. and Mrs. Charles E. Staats, of Charleston; and Dr. and Mrs. Gates J. Wayburn, of Huntington.

The following West Virginia initiates were received into fellowship at the meeting: Drs. Robert T. Coffman, Keyser; Gates J. Wayburn and Walter R. Wilkinson, Huntington; William E. Gilmore, Parkersburg; and David W. Palmer, Wheeling.

Dr. Alton Ochsner, of New Orleans, is president of the college. Dr. Harold L. Foss, of Danville, Pa., was named president elect; Dr. Robert H. Kennedy, of New York City, first vice president; and Dr. Thomas F. Mullen, of San Francisco, second vice president.

The registration totaled 7808, with more than 3800 doctors being present. The technical and scientific exhibits were of a comprehensive and high standard, and TV and motion pictures played a prominent part in the five-day meeting, and colored three-dimensional movies were shown for the first time.

Cine clinics, in which a colored movie of an operation is shown while the operating surgeon discusses the technique and other features of the case, proved to be very popular.

J. Stanley Turk, superintendent of Ohio Valley General Hospital, Wheeling, was among the hospital administrators attending the meeting.

NEW AMA COUNCIL

The AMA Committee on Rural Health has been elevated to the status of a Council of the Association, effective immediately. Action changing the status of the group was taken by the AMA Board of Trustees at a recent meeting in Chicago. Dr. F. S. Crockett, of Lafayette, Indiana, will serve as chairman of the Council and Mrs. Arline Hibbard, of Chicago, as secretary.

DOCTOR KOENIGSBERG ELECTED ACA FELLOW

Dr. Max Koenigsberg, of Charleston, has been elected an Associate Fellow of the American College of Allergists.

DOCTOR KLUMPP RECUPERATING IN FLORIDA

Dr. James S. Klumpp, of Huntington, who has been ill for several weeks, has recovered sufficiently to go to Florida, where he will spend the winter months recuperating at Delray Beach. His address there is 148 Seventh Avenue, N. E.

Doctor Klumpp is just completing his fourth year as a member of the Council, and he was present at the final meeting for the year which was held at Parkersburg October 28.

PH OFFICIAL LEAVES FOR PANAMA

Mr. William H. Rost, director of the bureau of public health education of the state department of health, has resigned to accept an appointment on the field staff of the Institute of Inter-American Affairs. He will serve as health education consultant to the Ministry of Health at Panama City, Panama Canal Zone.

The activities of the new program include the construction and operation of health centers, the conduct of a campaign against epidemic and endemic diseases, the dissemination of health information, and the training of local health personnel in modern public health practices.

According to the current issue of Health News, official organ of the State Department of Health, the primary purpose of the program is to strengthen the basic economy of the host country and raise the conditions of living to modern-day standards. The program provides that the host country will supply the major portion of the personnel and funds, with the United States Government furnishing technical assistance.

Dr. B. M. Drake, deputy director of health, will serve as acting director of the bureau of public health education until a successor to Mr. Rost is appointed.

THE PRICE OF PUBLIC RELATIONS

Public opinion can be altered, but not without paying a price. At a cost of $25,000 or $50,000 or more a firm of experts could be employed to correct false impressions and lack of information the public may have. Experience has proven such a procedure to be effective. The outcome can be predicted with scientific accuracy, but the cost is high.

Medicine has an alternative at its disposal. In contrast with much of industry the medical profession can provide its own public relations. This can also be effective. Again the results can be guaranteed, but once more there is a cost involved.

It is the price you pay for practicing a superior quality of medicine, giving to each patient who trusts his health into your care the very best service you can give him.

It is the price of making him feel your genuine concern over his personal welfare as though he is the only patient you have.

It involves a word of reassurance, a smile perhaps, a gesture of friendship offered in a leisurely manner that belies your own weariness.

It is the personal sacrifice in being more than fair in the matter of economics. It is thinking in service rather than dollars so that your patient not only understands your charges but leaves with the feeling that he received something more than he paid for.

It is the cost you pay for having genuine respect for the ability and integrity of your colleagues in the medical profession, and in return earning their confidence for everything you say or do.—J. Kansas Medical Society.

A CHRISTMAS STORY FROM OVERSEAS

He wasted no time on the platitudes commonly expected on a first visit. I had a quick impression of cherubic pink cheeks, a magnificent snow-white beard, and morning dress (unusual in my practice), but I had no time for a further survey before he dropped heavily into the patients' chair and announced, with a strong Continental accent, "You must help me. I am too thick."

I'm used to patients who come to be cured of obesity, but they are generally women and most of them are under sixty, whereas this man must have been at least seventy. But it wasn't for me to dissuade him from regularising his waistline, which was undoubtedly too expansive, so I took up my pen and prepared to take a history. It wasn't easy going; apart from the language difficulty, there seemed to be some misapprehension in the old fellow's mind that we'd met before and that I must know everything about him. I was convinced that I'd never treated him before, though when he first came in I had felt that I'd seen him somewhere in different surroundings and totally different clothes.

Anyway, after a quarter of an hour one thing had clearly emerged. It wasn't for his looks that he wanted to lose weight, but because his girth was interfering with his job. "Still working?" I inquired, surprised at the staying powers of some of our seniors. He shot me a glance of as near shocked contempt as that benign cheerful face could express. "Every year I work," he said with dignity. "Last year I was also thick, though not as now, and it was a very tight squeeze, but this year I am already so thick I have fear I shall not get through. So I came to you in good time that you may me smaller make before my work begins." Ah! Seasonal work, I though. But I ventured to hint that perhaps at his age (he was obviously comfortably off) it wasn't necessary to work at all. This time I got a really scorching glance from his surprisingly youthful blue eyes. But he calmed down again, and thanked me politely for the usual advice I gave him on diet and exercises.

"It is not chust for myself," he said, as he rose with difficulty from the comfortable chair I provide for my patients. "It is for my staff also. If I any bigger get they cannot any longer pull me. At any moment they may—how do you say?—strike. It is heavy for them with me, and all the extra loads, you know." "Have you a large staff?" I inquired politely. "Six or eight always, some extras in the stables," he replied. Now at last I understood. Unlikely as it seemed at such an age my patient was connected with a riding school and still rode occasionally for demonstration or teaching purposes. He might even be attached to a circus—that would explain the seasonal aspect of his job.

"Ah," I said knowingly, as we shook hands at the door, "I see now. You work with horses." "No," he replied, as he turned to go. "You have forgotten, my child. Reindeer."—The Lancet.

DOCTOR CARTER ACCEPTS LAHEY FELLOWSHIP

Dr. Eugene S. Carter, Jr., of Montgomery, has accepted a Fellowship in internal medicine at the Lahey Clinic, in Boston. His address is 56 Madison Avenue, Newtonville, Massachusetts.

SEMINAR ON CANCER DIAGNOSIS AND CYTOLOGY

The Cancer Cytology Center of the Dade County Cancer Institute, an affiliate of the Medical Research Foundation of Dade County, Miami, Florida, will conduct a week's seminar for physicians, January 14-19, 1952. All sessions will be held at the Instttute in Miami.

Instruction will be under the supervision of J. Ernest Ayre, M. D., director of the Institute, and its research staff. The faculty will be composed of more than twenty local and visiting physicians and scientists.

The general course of instruction in cancer diagnosis and cytology will include lectures, demonstrations and symposia covering the various branches of medicine as related to cancer, including clinical, cytological, surgical and histopathological fields.

Full information concerning the seminar may be obtained by writing the Director, Dade County Cancer Institute, 1155 North West 14th Street, Miami, Florida.

WILL SEEK CHANGES IN COMPENSATION FEES

A meeting of the sub-committee of the special committee appointed to seek an overall revision of the Workman's Compensation fee schedule will be held at Charleston the middle of December with officials of the Workman's Compensation Fund. The Compensation Commissioner, Mr. Curtis Trent, and the Assistant Commissioner, Mr. John Ward, will be present at the meeting.

The members of the sub-committee appointed by the chairman of the special committee, Dr. R. O. Rankin, of Wheeling, are as follows: Dr. Ralph S. McLaughlin, Dr. H. A. Swart, Dr. A. A. Wilson, Dr. W. F. Shirkey, and Dr. Wm. B. Rossman, all of Charleston.

The special committee has unanimously agreed upon a proposed schedule, which will be submitted to compensation officials at the December meeting.

DOCTOR McLAUGHLIN ON RICHMOND PROGRAM

Dr. Ralph S. McLaughlin, of Charleston, has been selected as one of the lecturers at the clinical session (PG Section), sponsored by the Virginia Society of Ophthalmology and Otolaryngology, scheduled to be held in Richmond, November 27-30. As a member of the faculty, he will lecture on Thursday afternoon, November 29, and Friday morning, November 30, on the subject of "Chemical Burns of the Eye."

NEW SUPERINTENDENT AT SPENCER

Dr. Robert T. Stenberg, psychiatrist at Richmond State Hospital, Richmond, Indiana, has been named by Governor Okey L. Patteson as superintendent of Spencer State Hospital, effective November 1, 1951. He succeeds Dr. Thomas S. Knapp, who resigned to engage in the practice of his specialty of psychiatry in Charleston.

MEDICAL JOURNAL CONFERENCE

Representatives of nearly all of the state medical journals published in the United States attended the state medical journal conference sponsored by the AMA and held in Chicago, November 12-13. Speakers included Mr. Walter Kahoe, director of the medical department of J. B. Lippincott Company, publishers; Harry L. Shaw, general editor of Harper and Brothers; and Lester L. Hawkes, associate professor of journalism at the University of Wisconsin.

Dr. Walter E. Vest, of Huntington, editor of the West Virginia Medical Journal, served as moderator at the final session on Tuesday morning, November 13. The guest speakers at that session were Mr. Wm. Alan Richardson, Rutherford, New Jersey, editor of Medical Economics, and Dr. Roger I. Lee, of Boston, a past president of the American Medical Association.

DOCTOR HUNDLEY HEADS VIRGINIA SOCIETY

Dr. John T. Hundley, of Lynchburg, Virginia, has been elected president of the Medical College of Virginia, and will serve during 1952. Doctor Hundley has visited West Virginia on several occasions as a guest speaker before various medical societies, and has many acquaintances among members of the profession, especially in southern West Virginia.

CONGRESS ON INDUSTRIAL HEALTH

The 12th Annual Congress on Industrial Health, sponsored by the AMA Council on Industrial Health, will be held at the Hotel William Penn in Pittsburgh, Pennsylvania, January 18-19, 1952. Dr. Anthony J. Lanza, of New York City, is chairman of the Council, and Dr. Carl M. Peterson, of Chicago, secretary.

DR. A. A. CARR IN KOREA

Dr. A. A. Carr, of War, who is with our Armed Forces in the Far East, has notified the McDowell County Medical Society that he has been assigned to duty with the Medical Corps in Korea.

DR. J. H. BABER RETIRES FROM PRACTICE

Dr. J. H. Baber, of Huntington, has retired from active practice on account of ill health and his offices in the First Huntington National Bank Building have been closed. His home address in that city is 1032 Eleventh Avenue.

NO AMA FELLOWSHIP DUES IN 1952

According to the November 19, 1951, issue of Dr. George F. Lull's Secretaries' letter, the Board of Trustees of the American Medical Association has ordered that no AMA Fellowship dues be collected for the year 1952. Doctor Lull has reported that the Board feels that the dues are no longer required since members of the AMA are now paying membership dues. Furthermore, the requirement for the collection of Fellowship dues has caused a great deal of misunderstanding and confusion among the members.

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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

OBITUARIES

MARSHALL ABNER MOORE, M. D.

Dr. Marshall Abner Moore, 62, of Montgomery, died at his home in that city, October 29, 1951, following a heart attack.

Doctor Moore was born in Lexington, Virginia, son of the late Edgar and Loula M. (Bell) Moore. He received his A. B. degree from Washington and Lee University in 1911, and his M. D. degree from the Medical College of Virginia, Richmond, in 1915. After practicing at McVeigh, Kentucky, for a short time, he moved to Kingston in 1920, where he engaged in industrial practice until 1938, when he moved to Montgomery. He continued in industrial practice in and near that city until his death.

During World War I, he served for two years in the Medical Corps of the Army, being attached to the 305th Field Artillery, 77th Division.

He was a member of the Fayette County Medical Society, the West Virginia State Medical Association and the American Medical Association. He is a past president of his county society.

Besides his widow, he is survived by two sons, James Moore, of Montgomery, and John O. Moore, of Lexington, Virginia; a sister, Mrs. T. R. Bowers, of Bristol, Tennessee; and a brother, Capt. G. A. Moore, USN, Providence Town, Rhode Island.

* * * *

ROSCOE JAMES NUTTER, M. D.

Dr. Roscoe James Nutter, 65, of Clarksburg, died unexpectedly October 27, 1951, at a hospital in Richmond, Virginia, where he had gone a few days previously for a physical check-up.

Doctor Nutter was born at Philippi, son of Enoch and Lena (Hudkins) Nutter. He received his early education in the Barbour county schools and later attended West Virginia Wesleyan College, at Buckhannon. He received his M. D. degree from the Medical College of Virginia in 1910, and was licensed to practice medicine in West Virginia that same year. He located at New Milton, in Doddridge county. He then located at Glenville, where he remained until World War I. in which he served as a member of the Medical Corps of the Army. Doctor Nutter located at Clarksburg when he was released from military service and continued in active practice there until his death.

Doctor Nutter was a member of the Harrison County Medical Society, the West Virginia State Medical Association and the American Medical Association.

Besides his widow, he is survived by two sons, Paul J. Nutter, M. D., of Fredericksburg, Virginia, and Harold M. Nutter, of Charleston; a daughter, Mrs. O. E. Corder, Jr., of Clarksburg; a brother, Richard Nutter, of Flemington; and a sister, Mrs. Chida Nutter, also of Clarksburg.

An expert is just an ordinary fellow away from home.—Anon.

TUBERCULOSIS ABSTRACTS*

OBSTACLES TO THE ERADICATION OF TB

There has been widespread publicity and jubilation over the drop in the tuberculosis death rate from the peaks of about 200 deaths per 100,000 population at the turn of the century to the provisional death rate of 26.1 for 1949.

It is good news! Unfortunately many have the impression that tuberculosis is a problem that is already solved. Yet tuberculosis is the principal communicable disease for the world as a whole. It is estimated that between 3,000,000 and 5,000,000 people die each year throughout the world from tuberculosis. Even in the United States, it causes nearly 40,000 deaths per year. It is the chief cause of death in the United States in the important child-bearing and child-rearing ages of 15 to 34. Because so many peaople die from tuberculosis in the prime years of life, it causes a potential loss of years of life approximately equal to cancer, and not far behind the combination of diseases called "heart diseases." Today, more cases of tuberculosis are known than ever before, due largely to our improved case-finding programs, and there is good reason to believe that the death rate is dropping faster than the prevalence of tuberculosis. Although eradication is the objective of all voluntary and official health agency workers concerned with the tuberculosis problem, eradication is still a long way off.

There are many obstacles to be overcome—obstacles closely related to the four basic activities in tuberculosis control, namely, case finding, treatment, increasing human resistance to tuberculosis, and research. For these activities, numerous tools and techniques are needed. Some of these are an adequate number of trained personnel, adequate physical facilities, health education, laws and regulations, record systems and statistical analyses, and adequate financing.

The present world crisis is a threat to the eradication of tuberculosis, as well as to every other ideal of the free peoples of the world. Millions of our citizens will have intimate contact with others all over the globe in the years to come, including areas of very high prevalence of tuberculosis. Such mixing will be on an unprecedented scale and will occur through troop movements, the program of technical assistance to backward areas, through service in the diplomatic corps, and in commercial ventures.

In spite of the uncertain days ahead, there is reason to believe, however, that eventually the obstacles besetting the free peoples of the world, as well as the obstacles in the control of tuberculosis, will be overcome and we shall finally see the day when the dreadful and unnecessary scourge of tuberculosis is a thing of the past.—*James Perkins, M. D., A Lecture Endowed by Michigan Tuberculosis Association, December 4, 1950.*

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COUNTY SOCIETIES

BARBOUR-RANDOLPH-TUCKER

Dr. Kathryn Boucot, director of the mass chest x-ray program for the City of Philadelphia and assistant clinical professor at Women's Medical College in that city, was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society held at the City Hall in Belington, October 18. Her subject was, "Differential Diagnosis of Pulmonary Infiltration."

The speaker said that she had written the heads of the departments of radiology and pathology in the five medical schools in Philadelphia, asking for a definition of pulmonary infiltration, and receiving nine different answers.

Doctor Boucot stressed the importance of a few points in diagnosing pulmonary infiltration. She said that patients are now going to see a doctor because of x-ray findings more than because they are not feeling well, such as was formerly the case. She further stressed the importance of making sure that x-ray shadow is in the lung rather than in the overlying tissue, such as the breast, the value of having serial x-ray, and the importance of the time interval between x-rays.

Numerous slides were shown during Doctor Boucot's address, illustrating cases of tuberculosis, carcinoma, Hodgkin's disease, and other pulmonary diseases. In connection with the slides, the speaker said that the history was most important as an aid in differential diagnosis, and she further said that pleuritic pain should make one think of tuberculosis, and that persistent severe pain was most suggestive of carcinoma. She discussed the value of sputum examinations and urged that cultures be done so that errors in diagnosis of tuberculosis would not occur.

Dr. M. Semon Lilienfeld, the president, presided at the meeting which was attended by 27 members and guests.

Dr. Samuel P. Asper, Jr., of Baltimore, associate professor of medicine at Johns Hopkins University School of Medicine, was the guest speaker at the regular monthly meeting of the Barbour-Randolph-Tucker Medical Society, held November 15 at the Tygarts Valley Country Club, near Elkins. His subject was "The Newer Treatment of Graves' Disease."

The speaker presented an excellent comprehensive review of the newer methods of treatment of patients afflicted with Graves' disease. He said that propyl thyrouricil was slow but safe in its action, and advised this treatment for from three to six months before surgery is attempted.

The speaker also discussed the new drugs, itrumil and tapazole, recommending the use of the last named drug for patients unable to tolerate propyl thyrouricil. He said that radio iodine is probably the best laboratory test for hyperthyroidism, provided the patient is

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and has been iodine free. He reported that some clinic groups were using radioactive iodine in preference to surgery, but that he and the group at Johns Hopkins still prefer thyrouricil except in cases which are bad surgical risks.

A question and answer period followed the presentation of Doctor Asper's paper.

At the business meeting preceding the scientific program, Dr. Guy H. Michael, Jr., of Parsons, and Dr. Karl J. Myers, Jr., of Philippi, were elected to membership in the Society.—Donald R. Roberts, M. D., Secretary.

* * * *

CABELL

Dr. Stewart H. Smith, president of Marshall College, and Dr. Howard Montgomery, medical director of the Red Cross Blood Bank Program for the Eastern area, were the guest speakers at the regular monthly meeting of the Cabell County Medical Society, held October 11 at Science Hall, Marshall College. Doctor Smith discussed the Community Chest Drive in Huntington, and Doctor Montgomery spoke briefly concerning the Red Cross Program, with particular reference to the Huntington Blood Conter.

At the business meeting which followed the scientific program, Dr. Gilbert Ratcliff was elected president of the Society. Other officers were elected as follows: Vice president, Dr. J. J. Brandabur; secretary, Dr. A. C. Esposito; treasurer, Dr. John Morris; and board of censors, Dr. R. S. Van Metre.

The regular monthly meeting of the Cabell County Medical Society, held in Science Hall, Marshall College, Huntington, November 8, was in the form of a symposium on diabetes mellitus.

The following program was presented, with each speaker being limited to five minutes:

"The Diabetic Detection Campaign."—J. Russell Cook, M. D., Chairman, Diabetes Committee of the Cabell County Medical Society.
"Newer Methods in the Diagnosis of Diabetes."—Gerald Eder, M. D.
"Diet in the Treatment of Diabetes."—W. C. John, M. D.
"Insulin in the Treatment of Diabetes."—Rowland Burns, M. D.
"Problems of Diabetes in the Field of General Surgery."—C. R. Jerrell, M. D.
"Diabetes in Children."—Edward J. Evans, M. D.
"Diabetes in Ophthamology."—William Marple, M. D.
"Diabetes in Urology."—Robert Erhard, M. D.

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